

A N
I N Q U I R Y
Into the CAUSE of the
P E S T I L E N C E.

I N T H R E E P A R T S.

W I T H A N
A P P E N D I X,

Containing some F A C T S taken from
History, the works of Physicians, &c.
relating to the Subject.

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P A R T I.

MANKIND have beheld, with astonishment, the effects of these mortal distempers, the Pestilence or putrid Fever, the Dysentery and black Scurvy, which, in every age, have greatly afflicted the world.

THESE evils are imputed to many accidental causes, and a variety of notions prevail concerning them: yet, although

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men are apt to yield implicit reverence to opinions which have been long established, or generally received, many gentlemen of the physical profession, and others who have reflected upon this subject, were never fully satisfied with these notions: therefore an inquiry concerning this important subject seemed to be wanting. For while the real cause is unknown, or appears uncertain, no human remedy can be proposed, capable of checking their progress.

LET us then examine the established theories concerning the primary cause of this distress.

PROSPER ALPINUS, a physician of Venice, who travelled into Africa, towards the close of the sixteenth century, in quest of physical knowledge, takes notice *, that the people of Egypt acknowledge the Plague is a native of their country, and breaks out in those years when the river rises

* De Med. Egypt. lib. 1. c. 15.

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rises to an uncommon height *. And authors in every age are agreed, that this fever rages more frequently upon the banks of the Nile than in any other country.

THE same author further observes, that the notion which prevails in Egypt concerning the cause of this fever on those occasions is, that the water of these extraordinary inundations, rising above the ordinary limits, does not get back quickly, but spoils the air, and creates the pestilence †.

ANY man however, who will duly reflect upon this notion which obtains in Egypt, and has been adopted in later times, will soon perceive its weakness.

WATER is the most valuable treasure in Egypt, a country where rain rarely falls; and the space that is not within the limits of the ordinary inundation, or that cannot

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* See Appendix, N^o. 1. † De Med. Egypt. lib. 1. c. 15.

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be supplied with water, by the art and industry of the people, is sandy desert. Now, should the waters, by getting upon these deserts, remain for some time amongst the sand, and be exhaled slowly, what poison can arise from these liquid pearls, that deck the bladed grass, (in the beautiful expression of Shakespear,) to spoil the air? We do not find that even the vast lakes of North America impart any thing noxious from their chrystal exhalations.

EVERY man, who has seen a lake of fresh water, must be charmed with the purity of that fluid.

IN Lochlomond in the Highlands of Scotland, and in all such lakes, where the water slides gently off, or when it remains undisturbed in their sandy beds, the water increases in purity; because water being specifically lighter than earth, must swim uppermost: and this must ever be the condition of lakes, formed in the sandy deserts
of

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of Egypt, undisturbed by current, rivulet, or storm.

DR. MEAD, who says in his book on the Pestilence, that he never saw a Plague ^a, writes contrary to the testimony of Alpinus ^b, an eye-witness of the progress of this fever in Egypt: for that author, upon the authority of Le Brun's voyages, c. 38. imagines, that a dirty canal in the city of Grand Cairo, mixed with the mud of the Nile, produces this fever that has so often alarmed mankind, and afflicted Egypt annually through all ages of the world ^c. But this alledgeance is surely a mistake; because all the dirty places in the autumn ^d, when the fever begins to rage, and in the winter, when it rises to its greatest malignity, have been long overflowed by the wholesome waters of the river ^e.

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^a Preface, p. 2. ^b l. i. ch. 14. ^c See Appendix, No. 2.
^d Ibid. No. 3.

^e The Nile, according to Herodotus, Diodorus, Alpinus, and other writers, begins to overflow its banks commonly
about

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THE causes then to which the rise and frequency of the Plague on the banks of the Nile have been hitherto imputed, do not give satisfaction; and therefore something less liable to exception must be sought after.

FAMINE in eastern countries has been, in every age, attended with the Pestilence; and to the effects of the corruption of the dead carcases of locusts upon the air, this sickness has been imputed *. Famines in the East proceed from the effects of long drought; whereas scarcity of Corn in the British isles has been always occasioned by too much rain. The food of the locust is grass, and other vegetables. In these seasons,

about the 17th of June, and the recess commences about the end of September, and is completed after November. Alpinus being an European author, and addressing his work to Europeans, who divide the year into four seasons, spring, summer, autumn, and winter, when he mentions the autumn in his first book, and 14th chapter, must mean the months of August, September, and October.

* DR. MEAD on the Pestilence, p. 32. see Appendix, No. 4. And all other writers on that subject are of the same opinion.

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sons, when long drought afflicts the land, the grass is the crop that is first consumed, and the gardens and corn-fields are the last.

IN northern climates, during a winter-storm, the feathered kind, not meeting with food in their usual stations, flock together, and make a vast shew, flying towards the sea-shore, and these lands that lie still uncovered with the snow. The locusts must feel the same impulse, directing them to these spots of garden and corn-fields that are yet green, in order to procure that subsistence they find cannot be obtained from the grassy lands. And the unhappy people of these countries, seeing a swarm of foragers near their habitations, and in unusual numbers, consuming the remnant of their all, conceive, no doubt, a vast abhorrence for the insect itself, and a terrible idea of their numbers.

THE juice of the locust, after it dies, must be in a few minutes dried up by the
scorching

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scorching heat of the sun; and when this is their certain state, their carcases cannot occasion a worse smell, nor do more harm in the air, than those fishes do that are dried in the sun, in vast quantities, upon the borders of the ocean, with or without salt.

MANY people in Britain, Holland, and Hamburg, have seen a dunghill, made up of the offal of whales, which occasions a terrible putrification; it seems to be more abominable than if a hundred dead horses were thrown into one heap, and consumed in their sap: yet we never found that the family of a farmer, the people of a parish, or a county, have been killed by the nearest approach they have made to these dunghills. But allowing, for the sake of argument, that these locusts, who have darkened the air in their flight, were vastly more numerous than they really are, or can be supposed to be, no man can maintain, that the greatest heap of these little
insects

of the PESTILENCE. 9

infects do amount to a quantity of putrifaction equal to that huge mass of corrupted matter produced in the cities of London or Paris; for, at a moderate computation, the quantity in either of these cities cannot be less than seven or eight hundred millions of pound weight every year; and a great proportion of this putrifaction is of the animal kind. This immense quantity of matter is first consumed in the bodies of men and of live cattle, by a heat equal to that of ninety-six degrees in the thermometer. It is further corrupted by the heat of the dunghill, and at last is spread forth upon those lands that lie in the neighbourhood of these cities. And though this be the situation of London and Paris, covered over with the exhalations extracted from this putrifaction, the Pestilence has not attacked these cities more frequently than others of a smaller size.

It is believed, that there have been, in ancient times, cities larger than London or Paris; such as Rome, in the zenith of her
B glory;

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glory ; Nankin and Peking in modern times ; with several others : so that a greater quantity of corrupted matter, than that of London or Paris, must have overspread these mighty capitals, tainting the air with its putrid exhalations ; and, by all accounts, the Pestilence has done no greater hurt in those places than at London or Paris, in proportion to the number of their inhabitants.

THUS, in hot climates as well as in cold, we see it the same : we find, that the vilest putrifications of these vast capitals, so far as their histories go, have not produced worse effects in the air than the filth of smaller cities.

THESE powerful facts obliged us to reject the received opinion, concerning the cause of the Pestilence in time of famine : therefore it remains to be accounted for.

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of the PESTILENCE. II

THE accounts concerning the pestilence agree, that the working people are first consumed *. In other distempers, such as the Small-pox, Measles, and Chincoughs, the rich, and their children in the cities, are no more exempted from infection, than the poor and their children; and, by the reigning evil among the horned cattle, the fat and the lean, the young and the old, are equally afflicted.

THE poor people, in general, dwell on the first floor, or in low tenements; therefore, as all men know, that bad effluvia, exposed to the air, instantly ascends, those who dwell higher from the ground, should be seized with infection as quickly as the poorer sort: and the reason for the working people being first cut down upon those occasions should also appear.

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WHEN

* SEE the Journal of the Plague at Marseilles in the year 1720, in Appendix, N^o. 5. and assented to in general by Dr. Mead, p. 23, & 24. in Appendix, N^o. 6.

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WHEN the Pestilence is supposed to come from the banks of the Nile, one third, a half, or three-fourths of every city has been consumed before it ceases; yet this spark of infection imported to Europe, is surely not as one to a million of that magazine of Plagues in store in these countries for their own inhabitants, as we shall soon find reason to believe. The clothes, and other effects of those unfortunate people, who die in Egypt of the Plague, are bought up, and used without scruple, by those who are left alive *. And as the Pestilence is a disease that a person may take oftner than once in his lifetime, like other fevers, it becomes, no doubt, a matter of surprise, that this country, in former ages, should have been so populous and flourishing; and that at present, when Egypt groans under the yoke of Turkish oppression, it should still be found to contain 4,000,000 of people †.

PROSPER

* Alp. lib. 1. c. 15. † Maillet.

of the PESTILENCE. 13

PROSPER ALPINUS remarks, that 500,000 people died of this fever at Grand Cairo in the year 1580*, which happened to be a little time before he travelled into Egypt. Now, if the infection of the Plague was as easily got, as the people of Europe imagine, the clothes and other effects of these 500,000, being bought up, and used by their neighbours, three times this number of people at least, should have instantly died; and the goods of those 1,500,000, so soon as they were disposed of, should have killed 4,500,000, if so many inhabitants remained; so that this gentleman should not have found any body alive in Egypt when he visited that fine country. But as there is no foundation in history to make us believe that such devastation ever happened, the people of Europe appear to be in a very great error in their notions of the Plague. Other epidemics, such as Small-pox, Measles, &c. when they have got a footing in a country,

* Alp. l. i. c. 15.

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country, do not abandon it: for the first of these evils has continued in Europe 800 years, the latter from time immemorial; and the reigning distemper amongst the horned cattle seems to be of the same nature: but the pestilence soon gives over its ravages, and seems only to reign annually in Constantinople, and upon the Nile: and why these things come to pass, should also appear.

WHEN we take a view of armies, nothing of consequence is handed down from the antients; and no body in modern times, till lately, has considered of their miseries*.

A ROMAN legionary soldier often carried twenty-two days provision of corn upon his back during his march, which, Cæsar says, in his commentaries, occasioned a desertion among his soldiers enlisted from the Highlands of Gaul, unaccustomed

* Dr. Pringle's pref. to his Observ. see Appendix N^o. 7.

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customed to such labour: for when this corn was added to the other baggage of a legionary and his arms, the load he bore could not be less than 120 pounds weight. Machiavel gives a particular account of the armour of those soldiers, with which the Romans subdued the world.* A head piece, a morion that covered the neck and shoulders, a brigantine that hang down and covered from his neck to his knees, greaves and gauntlets covered his arms and legs, all of iron; a sword four and one half feet long hung upon his left, and a dagger stuck upon his right side, a pile in his right hand, and upon his left arm hung a shield six feet long and three feet wide, surrounded with a ring of iron, and in the center, a ring of the same metal was placed, on which it lay when the soldier came to his rest, and iron covered the face of this massy shield. Now, notwithstanding this burden of the legionaries in the Roman armies, the rigour of

* C. 2. upon the art of war.

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of their discipline, their quick marches, and other labours, which are well known, the Romans rarely perished by disease*. The whole load of a modern foldier rarely amounts to fifty pounds weight: and notwithstanding this great difference, although we see the porters, and other labourers in town and country, daily undergoing the severest toils, without any apparent injury, people generally impute to fatigue those diseases that kill soldiers upon their march, and seamen during a storm; yet it would seem that fatigue does not occasion this distress.

From the evidence of Cæsar's commentaries, and his own experience, we learn, that the air of Gaul was good†; but in later times, the air and water of this fine region are represented as poisonous, which seems also to be a mistake‡.

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* See Marf. Saxe's surprise on this account, in article third of his Reveries, Appendix No. 8. † Appendix No. 9. ‡ See Dr. Pringle's Observ. and other accounts concerning the destruction of armies.

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WHATEVER nature the ground is of, on which an army happens to be encamped, the same fatal disasters attend them; and they are quickly cut down by putrid Fevers and Dysenteries: for although it is observed that damp ground is the worst for an encampment, and it has been frequently found that part of an army, which lay dry, has escaped, when another part of the same army, that lay wet, have been destroyed by disease; (as Dr. Pringle in his Observations, upon many occasions, justly remarks,) yet the best ground that ever was marked out for an encampment, proves also an inglorious grave to the brave soldier; for, in prince Eugene's camp at Belgrad, situated on the banks of the Danube, the air was pure, the water was good, and plenty of all kinds of food, and other necessaries, abounded; yet of 55,000 men who entered the camp in May 1717, 22,000 only were able to bear arms upon the eighteenth of August; the other 33,000 were dead or sick*.

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* Saxe's Rev. art. 3. Appendix No. 8.

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THERE is nothing more noxious in a camp than in a town ; therefore the bad effluvia of Prince Eugene's camp, containing 55,000 men, should not have done more harm in the air, nor amongst the foldiers, than the effluvia of an equal number of people dwelling in a city ; for a city is a perpetual incampment : and four times this number dwelt at Vienna, three times this number at Prague, five times this number at Amsterdam, ten times this number at Paris, and fourteen times this number were dwelling at London, in the year 1717, and no such calamity did arise from the air of these cities ; therefore, it would seem, that the primary cause of this, and such misfortunes befalling armies, does not arise from bad effluvia.

WHEN we extend our view to the sea, and to many situations at land, where men feed upon salt provisions, there a fever, slower in its fury, sweeps off amazing numbers of the youth and strength of every

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every nation, during peace and war. This fever goes by the name of the *Black Scurvy*; and to prevent such misery from taking place, many experiments have been tried in vain*.

UPON those sad occasions much evil has been imputed to salted food; yet salt is an antidote against the powers of corruption; for it does not hold, that altho' greens throw off the scorbutic disorder, that salt provisions occasioned the disease: and upon a comparison of facts, to be made hereafter, the effects of salt provisions will appear in a favourable light. Bad air at sea too is an object worthy of attention, when a ship is sickly, and to it great miseries have been imputed: but if the air of a king's ship, or of a prison, where few sick persons are to be found, could kill strong men, the Spaniards of the Manila Galeon, taken by Mr. Anson, should

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have

* See the accounts from different authors, relating to the scurvy at sea and land, in the Appendix.

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have perished in a few hours: yet all men know that infections are caught from ships, prisons and hospitals, where a croud of sick do breathe.

MR. ANSON took this ship, upon the twentieth of June 1743, off the Bashee Island in the East Indies. 400 people were put down into the hold of the Centurion, upon an allowance only for each man, during twenty-four hours, of an English pint of water to his salt food. The weather was prodigiously hot, and the stink of the hold dreadful beyond imagination; yet all these men came out alive, after a confinement of thirty-eight days: and of eighty-four who were wounded and kept above, three only died; and these the first night they came on board the Centurion*.

EXPERIMENTS in natural philosophy have been made†, which shew, that animals

* Ans. Voy. c. 8. see Appendix No. 10. † Boerhaave and others on dogs in glass ovens.

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mals cannot breathe in a confined situation, where perspiration is stopt, and a proper supply of fresh air cannot get in; and an experiment much grander than any of these, though of a horrible nature, was made upon the English at Calcutta by the late Nabob of Bengal, when seven-eighths of their number died by one nights confinement in the black hole. It is scarce possible then, that men could breathe in a worse situation than that of the hold of the Centurion, with the hatchways open; yet in this situation, in the midst of horrid putrifaction, human life was sustained. And when this was the case, better aired places, where a croud of sick do not breathe, ought not to destroy men, when in towns, on ship-board, or in prisons.

WHEN the New-England militia landed in Cape-Breton, and came before Louis-burg in the year 1745, they were seized with a flux, from the wetness of the ground; but it did not prove mortal to any body.

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The place surrendered on the 17th of June, and in August one half of the garrison fell bad of putrid Fevers and Fluxes, by which they quickly perished *. And because this and such disasters have happened in that region since the year 1745, the air of Louisburg is thought to be a poison. But when we look back to a former period of history, we must believe, that the air of the channel is equally bad with that of Louisburg: for Count Mansfeldt's army of 12,200 men were consumed in a few weeks in the channel, in the beginning of the year 1625 †: yet we do not believe that the air of the channel is a poison, nor that the air of Mansfeldt's ships was so bad as that of the hold of the Centurion. The cause of this distress does not seem then to depend on the air.

THOSE who remain unconsumed on those occasions, consist mostly of the officers and

* Doug. Sum. vol. 1. p. 351, 352. † Rushworth's collections, see Appendix, No. 11.

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and boys; for we find the Spainards in sad distress when they came on board the Centurion from the Manila Galeon, as they observed that 500 stout men had been forced to give up their rich vessel to a handful of striplings *. And the extraordinary Gazette, of the 18th of August 1758, informed us, that the remains of the crews of five ships of the line, and six frigates, found at Louisburg, consisted only of 1249 men in health, and of these 135 were officers: and, by all accounts, this in general is the case. This circumstance agrees exactly with what happens by the Plague in the cities, the working people, or poorer sort, die first. It agrees also with what happens in armies, the officers generally escape, when the common men are cut down by disease †.

WHALE ships, going out to the Greenland seas, have no better food than King's ships;

* Anson, c. 8. † Dr. Pringle's Obs. p. 11. see Appendix, No. 12, & 13. and other accounts.

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ships; and, in general, the crews of the latter are consumed by the Fever and Scurvy, more quickly in cold than in hot climates. And the crews of merchant ships do not often taste of sickness during their voyage. These circumstances also remain to be accounted for.

FROM the sea we may cast our eyes back upon the land; and there most cities invested by armies, for a considerable space of time, have been seized with a pestilential Fever *: and the cause of these misfortunes has been supposed to arise from places crowded with people and cattle; as Athens, during the second year of the Peloponesian war. This city took in a compass of seventeen English miles †, and most of the effects of the Athenians were transported before the invasion to Euboea, an island in their neighbourhood. But allowing that all the effects
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* Dr. Pringle's Obs. p. 238. see Appendix, No. 14.

† Thucidides.

of the PESTILENCE. 25

of the Athenians were actually inclosed within the walls along with their owners, the city would not have been more crouded than London is at this day; and London, or any other city, during any period whatever, was never so much crouded as the hold of the Centurion in the month of June and July 1743. Musty corn and meal at Marseilles, besieged by the Romans *, was the supposed cause of the Pestilence that broke out in that city in the time of the siege. The soil and air of the place are dry; so that the grain could not be more the worse of keeping there than at Dantzic when kept several years: and these corns kill no body, so far as we know and have experienced. Upon other occasions, great calamities are imagined to have arisen from putrid cabbages and plants in marishes †; yet the vegetable putrefaction extracted from the cattle killed at Edinburgh is cooped up in noxious dung-

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* Cæs. Com. b. II. c. 9. † See Dr. Pringle's Observations, p. 288.

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hills for a long time together, and great quantities of this filth make part of the North-Loch; yet it has not depopulated the adjacent houses; for the people in its neighbourhood meet as seldom violent deaths by Fevers, as others do who dwell on the Castle-hill: and even these vegetable putrefactions are not equal to the cadaverous smell of the offal of whales, or the dirt of London or Paris.

LASTLY, We have not seen any reason given, how it came to pass that Europe, in ancient times, should have abounded with our species, and that North America should have, in time past, remained almost a desert. Great complaints indeed are made of wood-lands and marishes, upon many occasions, in America; yet in Europe, while in its barbarous and savage state, woods and marishes abounded, as they do now in these spacious regions of the western world.

SUCH

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SUCH a variety of circumstances which stood in opposition to one another, and the diversity that appeared betwixt facts and opinions, which has, in time past, perplexed mankind, in their inquiries concerning the origin of this distress, that in ancient times went by the common name of *Pestilence*, and in later ages has received the appellation of *True Plague*, or *Putrid Fever*, *Dysentery*, *Black Scurvy*, &c. led us at first to call in question the established theories; as from the facts produced, there seemed no foundation for a belief that the source of these evils has yet been discovered, by which every nation, through all ages, have been thinned in their turn.

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P A R T II.

SINCE therefore the origin of this distress does not exist in air, in climate, or in diet, so far as we are forced to believe, where shall we search for it? One object only remains untouched, which is, the HUMAN FRAME.

LET us then consider the real state of this fair fabric of Divine architecture; and if the cause exist in a necessity of its animal

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mal œconomy, the history of mankind ought to give ample testimony in its favour: and this evidence should be confirmed by what happens amongst the brute creation, whose frame and manner of life resembles the human.

THE natural pulsation of the heart is generally found to be seventy-six strokes in a minute; it is consequently a violence done to the constitution, should it give eighty for some considerable time. And if the natural pulsation was eighty, it would become an unnatural circumstance, should it give ninety or upwards: and when the heart gives these, or a greater number of strokes, during any violent motion of the body, the lungs play with a proportionable force, in support of this motion. The natural pulsation being seventy-six in a minute, the person whose heart keeps time nearest to nature, beats nearest to this standard during his life: for by the powers of the motion of the heart and
lungs

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lungs the wideness of the larger blood-vessels is determined *.

LET us then take a view of mankind, in order to know how far they act with propriety in regard to the just formation of their frame. In this view, it is necessary to divide mankind into three classes.

IN the first class, we may take in the ladies of fortune, in general, over the world, especially those of China; the ladies confined in their Seraglios through Asia, and religious houses in the popish countries of Europe, and indolent gentlemen.

THE second class are gentlemen who take exercise for their amusement, the masters of those employed in a variety of labour, and striplings.

THE

* THE heart and lungs, by their motion, must determine the wideness of the blood-vessels, as no other power interposes in the circulation.

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THE last class are the poorer sort, who earn their bread with the sweat of their brows; of them the bulk of all nations, consequently of cities, armies, and the crews of kings ships, is made up.

WHEN a person of the first class attempts moderate exercise, his first effort is impossible to be accomplished; because, the motion of his body forces towards his heart and lungs the mass of blood, with more than its natural motion, and their painful efforts are incapable to give relief upon those occasions; so that he is cut short in his attempt, as his respiration is stopt: he pants, he struggles incessantly, until his blood returns again to its natural motion, and at that time only he can breathe without pain. This distress in the animal œconomy, proceeds from the natural straitness of the larger blood-vessels, which suffers his natural quantity of blood to circulate with its usual motion, but cannot admit so great a
part

of the PESTILENCE. 33

part of this quantity to circulate, as the performance of these motions push incessantly into the heart and lungs. The situation of human affairs has made it necessary for exercise and labour to be carried on in the world: our Creator therefore has suffered a violation in the human constitution, by an enlargement of the blood-vessels; for, if they did not widen, in proportion to the degree of the circulation required, we could not breathe, with our natural quantity of blood, when we attempted action, and neither exercise nor labour, in that case, could go on in the world.

If the blood-vessels of a man, who lives long in a state of entire indolence, hold twenty-four pounds, this quantity is all the nourishment his constitution requires for its support; because nature has formed her works with infinite exactness; therefore a less quantity than this would diminish the strength, and might occasion a
E decay

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decay of the constitution, as a greater quantity could not be of use : therefore, if a space is opened for the reception of more than twenty-four pounds, it must be unnatural.

WHEN a man endeavours to walk quickly, the heart and lungs work with a force above the natural ; when he runs, or performs any hard labour, this motion is still increased, until the natural quantity of blood has full room to circulate. Therefore, as the motion of the heart, at seventy-six strokes in the minute, supported by the play of the lungs, widened these laxative vessels, for the reception of the necessary quantity of nourishment, a motion superior to it must have enlarged their measure, perhaps from twenty-four to twenty-six in the second, and to twenty-eight or thirty pounds in the third class, or to a size exceeding the natural, in the active, and greatly above it in the laborious : and the heart, the lungs, and the tubes themselves, while their measure is enlarged

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larged, must be waxing strong and rigid, like the hands of the tradesman, and the feet of the carrier, in proportion to the degree of exercise and hard labour they support.

THE function of the kidneys is to separate the urine from the blood, which passes off to the bladder; and by perspiration the grosser substance is carried off, when it becomes unuseful. These channels are the drains by which the constitution is relieved of inactive matter; for the chyle or food, which ascends through its channels, from the sides of the guts, cannot make its way back again, by reason of its being shut in by the valves on the lacteal vessels; neither can it get off, when it makes its way to the heart, by the other vessels connected with the animal œconomy; because nature has formed these, to perform other functions peculiar to themselves, the same in the gentleman as in the labourer, and the same in the lady as in the handmaid*.

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EACH

* By gall, saliva, the brain, and the menstrual discharge in women.

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EACH class then, requires their degree of relief.

THE first, as they possess at all times their natural quantity of blood only, are relieved by the natural perspiration.

THE second, in consequence of their exercise, are freed from their superfluous quantity of matter, by a degree of perspiration above the natural; and,

THE third class, in consequence of their toils, are relieved of their bane, of which they possess a great quantity.

FOR that degree of relief, which nature affords the indolent, although it is sufficient for them, yet it is not sufficient for the active; neither is the relief of the second, sufficient for the labourers of the third class; because, so soon as exercise and labour ceases, the blood-vessels are necessarily kept full, consequently their constitutions require, that the superfluous gross matter, which cannot get off

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off in urine, nor circulate in the constitution, should all of it timeously perspire.

THE human frame is violated by the quick circulation, which exercise and labour occasions, and these motions relieve both classes, in their turn, of their bane, by an increase of perspiration, conformable to their condition, during all seasons.

EVERY man may feel in himself, and observe in others, that this is the state of each class. The first cannot take exercise, because their respiration is stopt; on those occasions, as it is impossible for them, from the natural straitness of their larger blood-vessels, to circulate the natural quantity of blood: neither can the second undergo the usual operations of the third class; for the same distress in the animal œconomy, which prevented the first from enjoying exercise, exists also in them, and makes it impossible, upon the first efforts, to undergo hard labour; therefore they
must

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must also find, that an unnatural change, in consequence of exercise and labour, has been wrought in an enlargement of the measure of the blood-vessels of both classes, by which a quantity of inactive matter has a lodgement, and that they require an increase of perspiration, above the natural, to take it off, in proportion to their condition; and that the proper means for procuring this evacuation, is for the second class to enjoy their usual exercise, and the third to undergo daily their wonted labours*.

WHEN this inactive substance, found in the second and third class, remains thirty days, by their usual perspiration being

* THE extension in the animal œconomy, when effected by slow degrees, may be reduced again to its natural proportion with safety. Every gentleman may remember this circumstance, by what he has felt at different times, from his difficulty or ease in breathing, when in performing his exercises: and old sailors in the King's service, and soldiers, keep their health in time of peace, when they have little to do, and ploughmen commence shepherds in their old age; and these transitions are not found to prove fatal to mankind.

of the PESTILENCE. 39

being stopt, it must become worse than when it dwells fifteen days only; and when it remains sixty days, it must become still more terrible, than when it remains thirty days, and so on, in proportion to the length of its abode. If fresh, it must act with greater violence, than when kept in pickle by the use of salted food: when fresh, it must appear yellow, when salted, black*, and impart these colours to the diseased; because fresh inactive matter or bile is yellow, and salted inactive matter is black†.

IF the primary Cause of the Pestilence, according to that extensive appellation, with the antients, or True Plague, Camp Fever, Epidemic, Dysentery, Black Scurvy, &c. according to the stile of the moderns, is this superfluous matter, mankind in general

* SEE salted beef and pork in the cask.

† Most people have experienced the effects of inactive food, in the dissolution of their teeth, it must have still greater power over all the other substances of the human body, as they are softer than the teeth, consequently more liable to dissolution.

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neral, when it is taken off, must be found free from these miseries; and when it remains a certain space of time amongst the blood, the laborious of the third class should first fall a prey to its influence; afterwards the active of the second class should also perish, and we should find their distress denoted by these various epithets, in the histories of all nations; infection from the sick, acting as a secondary cause, should also, in the course of this narration, show its baneful effects, upon a near approach to these terrible scenes of mortality*.

* THE grand symptoms are headachs, sickness, vomiting of bile, putred stools, boils and pustles on the surface, dejection of spirits, and deliriousness. It is natural to expect some variation in different climates. More violent approaches towards the skin, when the surface of men's bodies are softened by extraordinary heat of the climate, and less frequent approaches, when the surface is hardened by the colds in the north.

EVERY circumstance that relates to the symptoms, is to be found in the facts that support this essay in the Appendix.

THE symptoms of the Scurvy, where salt food is the diet, are more favourable, and differ from the Fever, in the degree of violence, the colour, and the advantages in the recovery.

A N

A N
I N Q U I R Y
Into the CAUSE of the
PESTILENCE.

P A R T III.

LET us take a view of mankind,
and of their history.

WE see the tradesmen in the cities, the
labourers in the country, and the miners
in the heart of the damp earth, all enjoy-
ing perspiration, the fruit of their toils, in
general free from the effects of deadly Fe-
vers. The active gentlemen enjoying their
exercise, the ladies, and inactive gentle-
F men,

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men, who eat and drink abundantly on all occasions, have also their suitable relief. Four hundred stout Spainards were confined, as has been observed, in the horrid hold of the Centurion man of war, in the hot climate of the East-Indies, during 900 hours: they came out alive; their perspiration had been excessive; for they went in stout men, and came ashore in China reduced to mere shadows: and of eighty-four wounded in the battle, and kept above, three only died; and these the first night they got on board the Centurion. An unusual escape for so many wounded by balls * !

WE see the crews of the Greenland ships go out and return, in general, free from distress, even in the coldest climates: for the fatigue they endure, when they go in quest of whales, and in their encounters with the ice, along with other labours, procures for them that degree of perspiration
their

• Anf. Voyage, c. 8.

of the PESTILENCE. 43

their constitutions require. This, in general, is the case with the crews of other merchant ships; they return from the most tedious voyages in health, when they are kept in their usual situation; and the sick and diseased in the hospitals, by the help of temporary evacuations, even in the midst of total inaction, are cured of their maladies.

FROM happy scenes, we shall begin with the sea, in taking a view of these dreadful events with which mankind have been astonished, and the world depopulated. Each of these facts gives nearly a view of what has always happened, therefore it does not seem necessary to be long in the detail of human wo.

JAMES I. in December 1624, intended to wage war upon the house of Austria, in favour of his son-in-law the Elector Palatine; and, to satisfy the enthusiasm of the nation, an army of 12,000 foot and 200 horse

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horse were put on board at Dover, under the command of Count Mansfeldt : they did not get landed at Calais, as was intended, by reason of an alteration in the measures of France. This army therefore remained confined on board the squadron in the channel for eight or ten weeks ; two-thirds of them were consumed by the Fever, and the other part melted away in Zealand *.

IN the year following, upon the 7th of October, the Duke of Buckingham embarked with an army of 15,721 men at Plymouth, in order to carry war into Spain. He landed at Cadiz, and, finding the place too strong, he embarked again, with an intention to hover twenty days for the Spanish plate-fleet ; but his attempt was frustrated by the effects of disease : he returned to port the beginning of December, with scarce so many men in health as could serve to bring home his ships †.

THE

* Rushworth's Collect. Appendix No. 11. † Ibid. Appendix, No. 15.

of the PESTILENCE. 45

THE situation of men confined in these vessels is well known to be a state of great indolence ; so that the degree of perspiration above the natural, which the constitutions of men formed for labour daily require, is not procured during their blockade.

IN spring 1693, Sir Francis Wheeler was sent from England, with a considerable force, in order to act offensively against the French settlements in America. He arrived at Boston June 12th ; by that time his people were very sickly : he intended to perform some notable exploit against the enemy, but found his scheme impossible to be accomplished ; for his squadron was forced home by sickness. He arrived in England October the thirteenth, with scarce so many people alive as were sufficient to work his ships *.

IN the next place, we shall follow the tract of Mr. Anson's voyage to the south-seas.

* Doug. Sum. vol. 1. p. 555. see Appendix, No. 16.

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seas. He set sail the 18th of September 1740, from St. Helens; upon the 20th of November the cry of sickness prevailed in the squadron *: this was the ninth week of their confinement. And when we look back upon this period of the two first voyages, made in the seas of Europe, in the winter season, Mansfeldt's men, who had probably fresh food, as they were not prepared for a tedious passage, were mostly dead, and Buckingham's men, who must have had salt food, as they were prepared for their voyage, were all sick. The little that men do in King's ships, during their passage to the south, makes them sweat somewhat, the evil day is thereby put off for a time; but in the north it can have small effect that way, especially in the winter. The crews of the two first blockades therefore fell sooner than Mr. Anson's people a sacrifice to the power of the interior inactive matter.

THE

* Anf. p. 48. see Appendix, N^o. 10.

of the PESTILENCE. 47

THE Centurion made St. Catharine's December 20th; from her eighty men were put ashore sick, with a proportional number of the other ships companies. At this port the sick increased aboard the Centurion to ninety-six *, which was near one-fifth of the crew; the number of deaths amounting to twenty-eight. Having recruited the health of the men by the ordinary methods, they set sail southwards on the 18th of January 1741; and after touching at St. Julian, they again set sail, and made Strait Lamair in the month of March. By that time the latent evil had full time to gather, especially as the climate was cold; so that the fatigue in passing the Cape, put their blood in violent motion, which brought out the distrefs. In April forty-three died aboard the Centurion †; and by the beginning of September three-fourths of the crew of the Squadron had perished ‡. This was the 12th month of their operations; most
of

* Anson, p. 76. † p. 139. ‡ p. 218.

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of these melted away the next long cruise; the remainder, as has been noticed, were a few of the officers and the beardless boys*; for the stout men, who were described in the third class, were consumed †. Such was the fate of this squadron: yet upon a comparison of their miseries with that of others of the third class brought into this situation, the progress of the devastation will appear one of the slowest instances in history, as shall soon be noticed.

THE British forces that went upon the Carthagena expedition, as is well known, confined in the same manner, suffered the same fate. The North-American regiment, consisting of 3,600 men, scarce any of them survived. And of 500 men from New-England, fifty only returned home ‡; few of these were killed by the Spainard.

IN the next place, we shall take a view of our rival nation, during such situations, in a temperate climate.

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* Anson, p. 494. † p. 218. ‡ Doug. Sum. v. 1. p. 554.

of the PESTILENCE. 49

A squadron was fitted out in the year 1746 by the French, with a view to retake Louisburg, and annoy the British colonies. It sailed from Rochelle the 22^d of June, under the command of Duke d'Anville; the whole force amounted to 10,000 men. He arrived at Chebucto September 10th, and by the 13th of November, about one half of them, with the Duke himself, were cut down by the sickness: so that this squadron, which seemed so powerful in the eye of their own nation, and so terrible an object to the colonies, returned with its wretched wreck, without being able to perform any service to their country *. The 13th of November made the 19th week of the operations of d'Anville's squadron, and two months of this time were spent in recruiting their health at land. The Centurion's crew, consisting of 506, by the 16th week of their cruise had only ninety-six sick, the dead amounting to twenty-eight †.

G

Mr.

* Doug. Sum. v. 1. p. 322. Appendix N^o. 18. † Anf. p. 76.

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Mr Anson had the benefit of a warm climate, which favoured perspiration; d'Anville, in the temperate climate of Nova Scotia, did not enjoy this advantage.

IN the first of the season 1757, a powerful fleet was fitted out by the same nation, in order to protect the important fortrefs of Louisburg; 13,000 men remained aboard the squadron in the harbour five months. In all they were out about eight months. A Gentleman, who was taken from on board a merchant ship, and kept prisoner with them all this time, informs us, that the whole occupation, with which this multitude were amused, so far as he could observe, was in smoaking, and shaping tobacco pipe-cases out of wood, at which art these unhappy men seemed very dextrous. By all accounts from France, the remains of this grand armament, in January 1758, did not consist of one tenth of the number that failed from the mother country in the spring.

SIR

of the PESTILENCE. 51

SIR FRANCIS WHEELER's people infected the inhabitants of Boston with their disease ; Duke d'Anville's people the simple Indians of Nova Scotia : Mr. Douglas says one third of their little nation was consumed ; and by the accounts from France, many of the inhabitants of Brest likewise received the contagion from the Louif-burg squadron *.

SUCH is the figure these powerful nations have made upon the watery element : and the annals of Britain and France show, how uniform these calamities fall on their people, brought into this situation, especially during first voyages, in kings ships, in proportion to their length, the number

G 2

of

* ANIMAL and vegetable substance, shut up in the blood-vessels, and beat upon for many days, by the force of animal heat, seems to be a degree of corruption, vastly exceeding any thing dissolved in the open air : and however far the primary cause may act in the destruction of mankind, infection, acting as a secondary cause, appears to have great influence upon the healthy, in promoting the devastation, on a near approach to such dreadful scenes of distress.

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of labouring men aboard, and to the degree of coldness in the climate.

FROM the sea, we shall view the devastation at land,

PLUTARCH, in his life of Pericles, observes, that a formidable army of Peloponnesians, and their allies, invaded Attica, and ravaged the country; that Pericles, the chief magistrate of Athens, determining to restrain the Athenians from opposing these invaders in the open field, had called in all the inhabitants of Attica within the city; that these people, brought from their labours in the country, indulging themselves in a lazy, and wholly inactive life, during the invasion, were seized with the Pestilence, which cut off the youth and strength of the state. The enemies of this magistrate, says this author, accused him for suffering his countrymen to remain in this indolent situation.

THUCY-

of the PESTILENCE. 53

THUCYDIDES the historian, an eyewitness of the misery, and who had himself the Fever, remarks, that the Plague seized upon the Athenians, not many days after the second irruption into Attica of Archidamus king of Sparta, the second year of the Peloponnesian war; that this had been the longest stay of the enemy in the country of Athens; and during the first invasion of these Dorians, and their allies, they had kept six English miles from the city, and the people were employed within the walls, in making for themselves houses, and also upon several expeditions abroad. But during the second invasion, and through the summer, when the Plague broke out and raged in the city, the people had no other labour, than burning and burying the dead, as these authors observe.

THUCYDIDES sums up his moving description of this sad scene, with a prediction, handed down from ancient times, which

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which was in every body's mouth upon this melancholy occasion. They convey to us a lively picture of Greece and her sufferings, during a state of war, and the sure effects produced from a blockade, as experienced by these nations.

"Two heavy judgements will at once befall,

"A Doric war without, a plague within your wall."

THOSE who take a view of the map of ancient Greece will observe, that the natural strength of Peloponnesus, warring upon Attica, must have bore down, in every age, this naturally feeble power; for, when a strong state in Greece made war with one less powerful, the weaker party retreated, the country was ravaged, and the capital town invested*.

THIS state of Inaction, Anxiety, Repining, and Distraction, which prevailed amongst the Athenians, along with watching

* THUC. v. 1. b. 2. see Appendix No^r 19.

of the PESTILENCE. 55

ing upon the walls, seems to be a true picture of the situation of cities, encompassed, or disturbed by the enemy: therefore the same distress should befall them when reduced to their situation; and among this number, we find the following instances.

ROME, during the invasion of the Æqui and Volsci^a.

MARSEILLES besieged by Cæsar^b.

JERUSALEM by Vespasian^c.

THE people of Edinburgh disturbed and frightened from their labours, in consequence of the war of James IV. and the fatal battle of Flouden^d.

AMIENS besieged by Henry IV^e.

ROCHELLE by Louis XIII^f.

EDIN-

^a LIVY A. U. 290, 291.

^d Maitland.

^c Davila.

^b Cæf. Com.

^f Lind.

^e Josephus.

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EDINBURGH, where the people were again frightened from their labours, upon the approach of the victorious army of Montrose*.

STETTIN besieged six months by the troops of Brandenburg, in 1677†.

THORN, upon the Vistula, blockaded five months by the Swedes, in the year 1703, lost almost the whole Saxon garrison; and those citizens, who substituted watching on the cold walls, in place of their labour, and a guard room for warm beds, suffered the same fate‡.

THE New England militia in garison at Louisburg in the 1745, were confined to the place, and they had no discipline nor labour ||. They got possession of the fortresses in June, and were cut down in August, and the following months.

THE

* Maitland. † Lind. ‡ Dr. Lind, see Appendix No. 30.
|| Doug. Sum. v. 1. p. 351, 352.

of the PESTILENCE. 57

THE garison of Oswego, upon the lake Ontario, in winter 1756, confined within the place, from a terror of the Indians *.

THE town of Swednitz, in Silesia, invested about three months, in the end of 1757, and beginning of 1758, by the arms of Prussia †.

SEVERAL of these garisons had salt food, and were killed, like the seamen, by the Slow Fever, called the *Black Scurvy*, the others fell by the Quick Fever or Pestilence.

FROM these instances of the effects of the interruption of labour, attended with want of usual perspiration to the active and laborious, in producing the Pestilence, as experienced at sea and land in every age, we shall take a view of those regions,

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where

* WE have this from a gentleman of the place. † London Gazette, April 29. 1758.

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where this misery has ever reigned with a dreadful sway, thinning the land of its people, and striking into mankind innumerable alarms* : these are the kingdoms of Egypt and Ethiopia.

THE river Nile, with a power irresistible, overflows these extensive and populous realms, forcing before it the country inhabitants, and confining the gentlemen, the gardeners, farmers, and other country labourers within the cities, far from their usual exercise, and toilsome employments ; for, by the flood, one half, or three-fourths of these nations are reduced to the same situation with idle warriors, encompassed by the sea, and nations in cities incircled by the enemy, these kingdoms exhibiting annually to the eye, the appearance of a royal squadron, with a shoal of attendants, hovering upon the ocean, from the middle of June till after November ; and
in

* BOTH ancient and modern authors are full in this particular.

of the PESTILENCE. 59

in order to obtain a satisfactory account of what happens during the blockade, we have recourse to Prosper Alpinus, already mentioned, a witness of these scenes of distress. He remarks*, that a pestilential Fever raged at Alexandria, where he was, during the second, third, and fourth months of the inundation; that the sickness grows to a vast height when the waters of the Nile rise uncommonly high, that is to say, the Fever goes on in proportion to the length of the confinement; that in these years, when the cities are uncommonly long invested, the people of Egypt allow that this Fever is the Plague produced in their country; and that in the year 1580, 500,000 people perished by it in the city of Grand Cairo alone †.

WE are under a necessity of following out this subject, and must therefore observe the situation of European cities alarmed with the dread of the Plague, and

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shall

* Lib. I. c. 14. Appendix N^o. 3. † See Appendix N^o. 1.

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shall omit mentioning any more than three cases.

IT has been noticed, (from Prosper Alpinus) that the Egyptians make no scruple of purchasing the clothes and other effects of those who die of this Fever; and his testimony is confirmed by all accounts from the Turkish empire. By the boldness of the Egyptians in approaching the sick, and perhaps too early their goods, it is probable, many lives are annually lost by infection. This nation then may be too bold, as the sickness swells to such a height in their cities: but, upon the other hand, we are afraid that the want of courage in the people of Europe, their timidity, and unnecessary apprehensions of the Plague, has plunged them into that abyss of distress, from which they fled.

ALL men know, from their own notions of the Plague, how terrible the object appears to them; and, upon consulting their hearts,

of the PESTILENCE. 61

hearts, they will feel them tremble at the very sound of this dreadful word.

WE have seen in the history of these situations already mentioned, where the Plague never was alledged to have been imported, as well as from the history of what happens during the inundation of the Nile, upon the ocean in King's ships, and in towns encompassed by the enemy, that the sickness begins to cut off the lower class of people, who are driven from their labours, (in temperate climates) towards the end of the first, or beginning of the second month of this their situation; and that the sickness increases in its violence, in proportion to the duration of their confinement: therefore with these uniform facts in our eye, we shall take a view of Messina in Sicily.

WE learn by a letter in the London Gazette, dated Palermo June 21. 1743*, and by several other letters published at that

* See Appendix, No. 22.

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that time in other Gazettes, that the master of a vessel, who had brought to the port of Messina a loading of wool from Missilongi, had, in his way thither, called in at Patrofa, a town in which the sickness at that time raged. The master of the vessel bought some tobacco and cotton-stuffs at this city, with an intention to have smuggled them ashore when he came to Messina. One of the sailors died during the passage, the master also died; and the remainder of the crew, being conscious they had called in at a sickly city, and that the clean pass from Missilongi had been presented to the magistrates of health, were apprehensive of the danger they imagined they were in, as well as that of the people among whom they were, acquainted these magistrates of their fears, of their calling in at Patrofa, and of the death of the master and sailor. Upon which the alarm was given, that the plague was brought to the place; that the Messinians had dealings with the crew, and
commu-

of the PESTILENCE. 63

communication with the vessel. The ship with her cargo was instantly burnt, excepting the things that had been smuggled ashore, and the men who remained were stript, and sent to the Lazaretto *. This vessel arrived in the month of March, and before the alarm was given some time must have elapsed. Any man in Europe, who lays his hand to his heart, will feel the terror; and that, had he been at Messina, he would have had no manner of communication with the people who dealt with the crew, and bought their goods, nor with those who dwelt by the port, nor with the port itself: and as the imaginary evil lay chiefly in the goods which were smuggled ashore, and scattered every where, the whole place must have felt the alarm, and during a month or six weeks remained in a state of dreary suspense; and those who were near the vessel, or had corresponded with the people aboard before she was burnt, must have continued totally inactive,

* See Appendix No. 20.

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tive, as no body would venture to employ them. The anxious Sicilians therefore attended only to the object of their fears, upon which they had fixed their minds, hearkening to the motion of the winds, the waves, and the rumours of the city, to know whether or not the Fever was broke out: and, during the dread of this alarm, it is scarce to be imagined that any body at Messina would venture to come out of their houses into the streets, or breathe with freedom the air, which they were taught by their ancestors to believe was a poison. What may discover also the greatness of the fright is, the court of Naples, in a letter published in the London Gazette, dated 27th April, consider the burning of the vessel and her cargo as a matter of great consequence, and had approved of this measure taken by the magistrates of health. This dreadful object therefore lay quiet in the troubled breasts of the unfortunate Messinians until the month or six weeks were expired, at which
time

of the PESTILENCE. 65

time the poor, driven from their labours, begin to fall in great numbers. Accordingly, the first notice we see taken of the affair is in a letter, dated Naples June 4. published in the London Gazette, which remarks, that the magistrates of health at Naples had cut off all communication with Messina, because an epidemical Fever raged there, which for some time before had killed fifty people a day *. The next letters from Palermo, of June 21. observe, it was the Plague; that it began to kill on the 15th of May†, and was making its usual havoc in that city.

FROM this late misfortune we may cast our eyes back to a former period, in order to view the fate of a more populous city than Messina.

IN the month of March 1720, the Pestilence raged amongst the Turks ‡: the
I people

* See Appendix, No. 21. † Appendix, No. 22. ‡ See the Journal of the Plague at Marseilles, in Appendix No. 5.

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people of Marseilles consequently were uneasy, as they carry on an extensive commerce in the Levant ; and their magistrates, attentive to the supposed danger, obliged the captains of every suspected vessel to serve quarantine, in the usual manner.

CAPTAIN CHATAUD arrived upon the 25th of May at the islands of Chateaudif, off Marseilles, from Sidon, Tripoli, Syria, and Cyprus ; he presented a clean pass to the intendants, importing, that he came off on the 31st of January, which was allowed to be before the disease made its appearance in those parts : at the same time the Captain informed them, that six of his men in the passage home, or at Leghorn where he had touched, perished by fevers. Upon the 27th one more of his crew died ; the corpse being carried to the infirmary, and there examined, a report was made, that his disease was not the Pestilence : however, the cautious magistrates ordered the cargo

of the PESTILENCE. 67

cargo to the infirmary of Marfeilles, there to remain forty days,

CAPTAINS GABRIEL, and AILLAND arriving from the Levant, with foul bills, their goods also were sent thither. On the 12th of June an officer placed in Chataud's ship died: but, notwithstanding of this accident, Chataud's passengers, who had been confined in the infirmaries, were perfumed on the 14th for the last time, and dismissed. On the 23d one of his cabbin boys and a servant, both employed in airing his goods, fell sick; and another porter, performing this office to the goods belonging to Captain Gabriel, was also seized with the distemper; and upon the 24th, a servant, employed about the goods of Capt. Ailland, was also seized in the same manner. These four dying, on the 24th and 26th, their bodies were examined, and a favourable report given of the cause of their death: yet the intendants, from a laudable though fatal precaution, ordered them to be buried

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in lime, the three ships to be carried to the island of Jarre, the yard where the goods lay to be inclosed, and the remaining servants to be confined. On the 7th of July two more of Chataud's men felt the disorder: their surgeon found tumours in their groins, but would not give their distress the name of Plague. Soon after this the surgeon himself, with part of his family, died. On the 8th, another servant of Chataud's seized with the Fever was examined, and a swelling being found by his surgeon in the upper part of his thigh, he pronounced immediately the distemper to be the Plague. He consulted with the intendants; they call others to advise with; the result was, they all concurred in his surgeon's opinion. On the 9th this patient died, he is buried in lime, and the goods of Chataud were instantly removed to the island of Jarre. In this manner the alarm was given at Marseilles in the year 1720. The dismal apprehensions of the raging Pestilence in the Turkish empire; so many
con-

of the PESTILENCE. 69

concurring accidents falling out aboard Chataud's vessel, and at the infirmaries; the anxiety discovered upon those occasions by the magistrates; and the report made, that the last-mentioned patient died of the Plague, impressed the Marseillians with dreadful astonishment. The frightful idea of an imported Pestilence presented itself in its ghastly form; and the most terrible consequences were expected immediately to ensue. Strict search was made in the city, in order to catch the lurking evil, and to root it out, but in this the people were greatly disappointed: three persons only of the city were said to have this Fever from the beginning of the alarm to the 26th of July, and even two of these cases were disputed. This disappointment gave an opportunity for the thinking part of the town to recover from their fright upon the 21st, and even to upbraid those who had founded the alarm: but the gathering storm broke out at the usual time upon its proper objects. The whole city in the utmost terror,

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terror, and every one suspicious of his neighbour's condition, there remained no leisure for occupying the poor, for confusion filled the whole city, the certain consequence of so great an alarm; and as Chataud's passengers had liberty from the 14th of June, this circumstance must have added greatly to their apprehensions: therefore that dawn of hope, enjoyed from the 21st, was overcast upon the 26th; for in the street of Laffelle, inhabited only by the poor, fifteen persons sickened, and a greater number of the same class were also soon after seized with the same distress. The trembling Marseillians upon this occasion, still eager to lay hold on every plausible consideration, reasoned with themselves, that as the Plague spread itself only by infection, why did the poor only die? how did not the rich as well as the poor suffer? and why did the distemper operate so slowly? The distress increased, and great numbers in every street, before the 17th of August, sickened, all of them poor people; there-

of the PESTILENCE. 71

therefore the unhappy Marseillians, still unwilling to part with their only hope, inquired, how, if it was the Plague, should none but these perish? but reasoning and doubt ended with this day, and their hopes were disappointed for ever: for the calamity was acknowledged by its judges to be this dreadful evil; and contagion soon after seconding the primary cause in its usual manner, and extending its influence, a multitude, consisting of every rank and age in the city, were mowed down.

FROM this catastrophe, we shall look back to a former period, in order to observe the consequence of an alarm, raised upon a more slight foundation than the arrival of Chataud's vessel at Marseilles; and by which the fate of a nobler city was determined.

THE people of England, in the year 1664 and 1665, were alarmed with the progress
of

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of the Pestilence, which, a little before, and at that time, raged in Holland. In London several alarms had been given, by people dying of violent Fevers, and several of those in St. Giles's parish got the name of *Plague*: for so soon as that part of the town was suspected, the people shunned all communication with it, and even with its neighbourhood *. In one week of the beginning of May, the deaths increased considerably, which struck a general panic into the anxious multitude, whose hearts had long trembled at their imaginary danger †. The week following, the number decreasing, the dread abated; but the week after, fourteen dying suddenly, the panic again seized the people with redoubled violence. Accordingly the burials soon increased to forty-three; and in June they amounted to 470 in a week by the Fever; for grass grew upon the streets, as business, from the beginning of the consternation,

* SEE the account of it by a citizen.
dix No. 23.

† See Appen-

of the PESTILENCE. 73

nation, had been totally relinquished. Burying the dead became the only occupation of the living. The mortality increased in September to 7165 in a week, and the whole city became one scene of death, sickness and lamentation.

THE distress went on as usual in these cities, in proportion to the length of the horror, till it had consumed its objects; but with more imaginary misery, than when men are deprived suddenly of their labours upon other occasions, and their distress denoted by a less dreadful name than that of Plague, as every fact already stated, and to be immediately given, serves to prove: yet the sickness is less fatal, in proportion to the numbers of people in towns, who consist of all the three classes, and who have their warm beds to sock in at pleasure, than to armies brought into the same situation, who consist chiefly of the third class, without any mixture of the first, and are harrassed with watching, as

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we shall afterwards take occasion to shew, by a comparison of these scenes.

FROM the effects of blockades, and sudden alarms, interrupting labour in European cities, and calling forth the Pestilence, we shall consider the consequence of the frosts in the North, where salt provisions are chiefly used during the winter; and as we beheld the months of August, September, October and November, to the end of the inundation, fatal by sickness upon the banks of the Nile, for a more powerful reason the months of December, January, February and March, is the deadly season in the frozen regions of the North, when, by its influence, labour is not only interrupted, but perspiration rendered difficult to be obtained.

THE hard and long frost of the year 1709, had the same effect on Dantzic, at the foot of the Vistula, and Hamburgh on the Elbe, with several other trading cities,
as

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as an inundation of the Nile on Egypt and Ethiopia, and must have thrown the porters, and a multitude of other labourers, usually employed in the trade and shipping, into the same situation with the gardeners and farmers of these countries; consequently the Plague raged at that time in these cities*. When we go to the more inland parts of the continent of Europe, we find the ordinary frost doing annual execution in the same latitudes†. Among these facts one seems worthy of particular notice. In the years 1738 and 1739, 30,000 people were engaged upon the banks of the Verona and Don, in preparing a fleet for the use of the Russian army. The boors of this country are, in general, accustomed to a lazy life, if they are not forced to labour: 27,000 of them, five or 600 sailors, and two or 3000 soldiers composed this body. In the cold month of February, the Scurvy made its appearance; the boors suffered little; the sailors,

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* SEE the Gazettes. † See Appendix, N^o. 24.

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who acted the part of their directors, suffered more; but the soldiers, their haughty lords, employed in watching this flock, in order to prevent desertion, were still more miserably afflicted.

FROM these cold latitudes, we pass to North America, where the annual frost far exceeds in severity what is felt in Europe in ordinary seasons, or even in the remarkable year 1709, occasioning, during the winter, more extensive devastation: for when we consult the history of Europe, in its savage state, it was ever fertile in people; while the northern half of the western world, seems, in ages past, to have remained almost a desert; less than 100,000 natives, according to Dr. Douglas*, is the amount of the inhabitants of the known parts of this vast and fertile continent. The French nation have been bent on establishing extensive colonies in Canada, equal to those of Britain, since the reign of

* SEE Appendix N^o. 25.

of the PESTILENCE. 77

of Henry the Great, but their attempt has proved ruinous, and almost vain *; for 150 years are expired, and the mother country drained during that time, and 12,000 men only was the number of the Canadians able to bear arms, according to the same author †, in the year 1747.

THE Hudson's-bay company, since they recruited their colonies from the idle fishers of Orkney ‡, bury few of their people ||; and the British provinces flourish, as labour goes on through the whole year. But constant labour seems not to be the habit of the savage natives of North America, although the necessity they lie under, in procuring food, drives them to it upon many occasions, which they must suffer for during the severity of the winter, when they dare not stir abroad.

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* SEE the French account of the distress in the winter, Appendix No. 26, 27, and 28. and the English account of it in Appendix No. 29. † Vol. I. p. 96. ‡ A circumstance well known. || Appendix, No. 29.

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THE Hudson's-bay company were taught by long experience, that such men only as they now employ, could survive the winter; and the preservation of the other British colonies, lying upon the skirts of the ocean, is procured by the benefit of an extensive commerce, which has rendered labour necessary, valuable and practicable, during every season. Far otherwise the situation of the French in Canada; they inhabit a country which lies farther to the North, at several hundred miles distance from the sea, and their communication with the world is frozen up during five months of the year.

FROM the dull regions of the North, we pass to the chearful climate of the South, in order to view a singular scheme, and its effects.

THE simple Indians of Hispaniola, having made their grand effort with an army of 100,000 men, in order to rid their
country

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country of Columbus and his Castilians, were unfortunately repulsed*. This trial of European prowess convinced the Americans, that any further attempt with arms would prove vain and ineffectual: they therefore had recourse to a stratagem, which afforded a prospect of better success; for, having long observed, that one Spaniard destroyed more provisions than ten of their people, they concluded, that it was impossible for such men to subsist in the island, were they deprived of the benefit of their labours; the Hispaniolans therefore formed the resolution to abandon the low country, and to the mountains they went, hoping by this method to starve their voracious lords; but the event proved lamentable on the part of the poor Indians; the Fever seized upon them in their retreat; scarcity of provisions obliged the remnant to return to their labours, and submit again to the yoke of Columbus. By these evils one third of this multitude were consumed.

FROM

* See Appendix, No. 17.

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FROM this sample of the dire effects of European usurpation in America, we may turn back to observe what passes during the summer amongst the nations bordering upon the Baltic.

SEVERAL gentlemen, who have been in these countries, inform us, and which is well known, that the royal squadrons of Russia, Sweden, and Denmark, when they returned to port in the third or fourth month of their cruise, as the Russian squadron did from Memell, and the Swedish and Danish from the coast of Norway, in the year 1757, were sickly, and often have buried one half or three-fourths of their numbers. These idle warriours, mostly peasants, forced from their labours in the country, when parting with their sorrowful friends, take their last farewell, in peaceful times, as well as in war, assured, from past events, they never shall return; the remnant, if not prevented, carry infection to land; and frequently it has happened, as
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of the PESTILENCE. 81

it did at Boston, Nova Scotia, Brest, and other places, many people die by contagion, when they approach very near this terrible distress.

LET us, in the next place, consider the situation of armies. Their time, during war, when employed in foreign countries, which is well known, is mostly divided betwixt watchings and intire indolence on one hand, and a state of violent action on the other.

THE two first situations stop that great degree of perspiration, which is necessary for the lower class daily to enjoy, and gives time to the latent evil to gather and corrupt. The last occasions a quick circulation of the blood, which extends the vessels beyond their natural dimensions, and never suffers their condition to mend during war; so that ten, twenty, or thirty days idleness, preceding one, two, or three days violent labour, calls
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forth that flame which consumes the brave, during the course of every campaign. We shall mention only a few remarkable events.

THE old manner of taking towns, before the invention of gun-powder, was, in general, by a blockade; and so soon as the wall around the place was finished, the bulk of the besieging army sat down in security and at ease, in order to give themselves rest.

THE sanguine Carthaginians, bent upon the conquest of Sicily, sent forth a vast army, under the conduct of Imilcon, in order to accomplish their scheme; and this army, having tore down many sepulchres, in order to form a wall round Agrigentum, were overtaken by the plague, and most miserably reduced*. The Carthaginians, observing no cause that had brought on this distress, were of opinion, that

* DIODORUS. The siege lasted eight months.

of the PESTILENCE. 83

that the misery which befel them, was a punishment sent from Heaven for having violated the monuments of the dead. Soon after this disaster, an army, still more numerous, of the same nation, under this commander, again invaded that fine island; and having nearly made themselves masters of Sicily, and meditating the siege of Syracuse, which they kept blocked up by sea and land, also met the Plague, which rendered the vast efforts of Carthage, for the conquest of Sicily, abortive. There was no enemy in the field to keep them in motion, and investing a town could not give labour to such mighty shoals of Barbarians*.

CÆSAR'S fine army, in like manner perished, when he became master of Italy; for he was obliged to remain inactive at Brundisium, for want of shipping to carry them in pursuit of Pompey†. And his enemy Labienus, mentioning this disaster,

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* DIODORUS. † Cæs. Com. see Appendix No. 9.

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in his speech before the battle of Pharfalia, observes *, that many of the conquerors of Gaul were consumed by the Plague in Apulia.

THE cruifading army of Louis IX. of France endured a blockade in their † camp at Carthage in Africa in the year 1270, formed by the moors; and that prince, with most of his men, were also cut down, without being able to do any thing in the pious purpose of conquering the Holy Land,

HENRY V. of England assembled an army of 50,000 men in the year 1415, in view of subduing a finer country. He made an unexpected delay of twenty or thirty days, in the midst of his embarkation, on account of a conspiracy against his life, in favour of the house of York. He set sail August 19th and upon the 25th of October, they were reduced to 10 or

11,000

* See Appendix. No. 9. † VOLTAIR.

of the PESTILENCE. 85

11000 men, that famous day on which this little army gained the battle of Azincourt: the season was wet; they had a siege, and some marches to make; they died chiefly of the Dysentery*.

IN the year 1717, as has been noticed, Prince Eugene with a fine army came before Belgrade. He threw up extensive lines to confine the Turkish garison within the place; he was obliged also to use the same precaution, to defend an eminence on which he incamped, in order to frustrate the efforts of the grand Turkish army that came to relieve the city. They encompassed Eugene in their turn † for ten or twelve weeks. These 55000 men in watching, during that time, upon these extensive lines, were reduced to 22000 able to bear arms, by the 18th of August, that day Eugene fought the Turks ‡.

THIS

* RAPIN. † See the life of Prince Eugene wrote by an officer. ‡ Saxe's Rev. art. 3. in Appendix, N^o. 8.

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THIS seems to have been the middle of the third month of the blockade from the time the works had been finished, at which about two-thirds of them were consumed, when every advantage of air, of climate, and of food was enjoyed. We shall compare it with the same period of other such situations, where the active and laborious have been deprived of their exercise and labour, so as to observe what effect climate and situation have upon the progress of the distress.

NOT many days had Archidamus, with two-thirds of the forces of Sparta and her allies, ravaged Attica, confining the Athenian nation within their walls, when the Plague broke out in the city, which consumed the youth and strength of the state; so that by this period the distress at Athens, as described by Thucydides, had been far advanced *.

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* Thuc. v. 1. b. 2.

of the PESTILENCE. 87

WHEN we take a view of the British channel, in the year 1625, an army consisting of 12,200 of the forces of James, under the command of Mansfeldt, had, at this period of their confinement on board their vessels, paid, long before it was due, the debt they owed to nature *. And in the same year, upon the ocean, before this period, an army of 15,721 men of the forces of Charles, under the command of Buckingham, in the like situation, were all sick, and forced to abandon their design on the Spanish plate-fleet †.

To the south, where great heat was endured, we find the forces commanded by Mr. Anson, had at this time only begun to taste the cup of distress ‡.

To the left of the Danube, we have an uniform view of the royal squadrons of Russia, Sweden, and Denmark, thinned by disease, making with speed, by this time, their

* Rush. Collect. for that year. † Ibid. ‡ Anson, p. 48.

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their way into port. To England in the year 1665, we find the vast capital of that kingdom, at this period of their horrible pannic, losing only 2010 of her people in a week; (the numbers of the dead as yet seems not to have exceeded 15000;) and the whole number who died that year of the Fever amounted to 68,596 *.

To the right of the Danube we behold Messina, a populous city, in the year 1743, alarmed, and driven into the same situation in the beginning of April, from the dread also of an imaginary evil, burying 3000 of her people, and 3000 more were sick in the hospitals by the 8th of June †.

AND to Marseilles in the year 1720, a city containing 100,000 people, the burials do not seem to have exceeded 6 or 8000; a distress, in proportion to numbers, far short of the real misery of the imperial and royal army of Eugene ‡.

WHEN

* Appendix, No. 23. † Ibid. No. 22. ‡ Ibid. No. 5.

of the PESTILENCE. 89

WHEN we extend our view towards the west, about this time one half of the colony militia, in garison at Louisburg in the 1745*, as many of the Duke d'Anville's forces in 1746†, and an equal number of the garison of Oswego, a fortress situated upon the woody banks of Ontario, in 1756‡, were rendered useless, or consumed by disease.

WHEN we turn back from these distant seas, these savage and uncultivated regions, to Europe, the Austrian garison of Shwedenitz, a town seated in the most pleasant and best cultivated country in Germany, was reduced to half its numbers, a few days after this period of the blockade, formed, during the 1757 and 1758, by the arms of Frederic the Great ||.

TURNING from the temperate climates of Europe, to take a view of the eastern

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confines

* Doug. Sum. v. i. p. 351, 352.

† Appendix No. 18.

‡ We have this from a gentleman of the place.

|| Lond.

Gaz. April 29. 1758.

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confines of Africa, we find the Egyptians, in that sultry region, at this period of the annual inundation, groaning under the effects of the deadly Fever, which as yet has not received that doleful epithet, a *True Plague* *.

FROM these comparisons it appears, that the devastation in Eugene's army the middle of the third month of their blockade, has been equalled by some, never exceeded by the distress of any people. Their watchings had been excessive upon their extensive lines; for on one hand they had a numerous Turkish garison to confine within Belgrade, and, on the other hand, they had to watch the formidable motions of a great army which hovered over their camp, with an intention to relieve the city: so that their time, as it would seem, having been wholly taken up in long watchings,

* ALPINUS, lib. 1. ch. 15. says, the opinion in Egypt was, that the evil of 1580 had been imported in October, which shews that the Egyptians think little of the distress till towards the end of the inundation.

of the PESTILENCE. 91

ings, and intire indolence, they could not enjoy that necessary and regular relief, by an increase of perspiration above the natural, required by the constitutions of men formed for labour: by which means their distress was rendered sudden and remarkable.

THE history of the Romans inform us of few such catastrophes as these befalling their armies: for the moving of the legionaries, who were the best men, and most used to labour of any in the Roman service, with their load of armour, gave them fatigue, and its consequences a sweat every time they mounted guard,

IN like manner, the armies of Prussia, after the first month of the campaign of 1757, were not heard to groan under a load of distress, when the banks of the Rhine, the Weser, and the Elbe, Swedish Pomerania, and the kingdom of Prussia, resounded with the complaints of their in-

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active adversaries*. And in the year 1758, during the constant and mighty efforts of this Hero, we heard of no sickness in his camp, while the noble representative of the illustrious Marlborough, soon after his blockade, fell a prey to the powers of interior putrification. And the brave English upon the heaths of Westphalia continue to meet their late leader's fate, as they did of old in the fertile fields of France, and in whatever foreign land they bore the arms of their country†. Nay, wherever men could breathe, and sweat out the evil, there they are not only well, but healed of their maladies. Eighty-one men of eighty-four recovered of wounds in the midst of great heat, and all the other Spainards came out alive from the horrid hold of the Centurion.

LET

* SEE the Gazettes concerning Appraxin's army, the French in Germany, the Swedes, &c.

† THE English regiment of Blue-guards have lost one-third of their number, and the battalions above one-fifth by the Fever and Dysentery.

of the PESTILENCE. 93

LET us, in the next place, consider the situation of the capital of the Ottoman empire.

CONSTANTINOPLE exhibits annually a singular scene of affliction*. This great metropolis is supported, not like other cities by the industry of the inhabitants. It is the residence of the Ottoman court, the great families of this vast empire, the officers of state, their dependants and expectants; into it is poured the wealth of all the provinces, to supply the luxury of the great. These proud Mussulmen have a vast desire of show, and a taste for a numerous retinue of servants and slaves, which is well known; the extreme poverty of the working people favours this taste; the cheapness of provisions, gives them an easy purchase, and the means of keeping up their domestics. Therefore this vast metropolis is in reality an idle encamp-

* SAUMERY's Memoires, page 165, 80,000 commonly die in a year, and 120,000 is thought a great mortality.

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encampment, with neither arms, discipline nor labour, consequently a continual recruit from the lower class is required, to fill up the places annually made vacant by the Fever.

IN the next place, we may consider one singular fact, which affords a two-fold view of the blockade, with the advantage that salt provisions have over fresh in the recovery.

THE royal African company of England, in the year 1723, fitted out the *Dispatch*, Bartholomew Stibbs master, with instructions for him, to proceed up the river Gambia, in order to make discoveries for their advantage*. When Mr. Stibbs arrived in that river, many of his numerous crew were dropping off by the Fever. Mr. Stibbs set out with fifty-two men, in five heavy canoes, from thirty-three to forty-two feet in length. His office was to keep the journal, Mr. Drummond the accompts. Mr.

* MOOR's travels, see Appendix No. 23.

of the PESTILENCE. 95

Mr. Hull went ashore on every occasion, as a mirror; and the remainder of the crew were left to take care of the ship. The labours of those who went upon the expedition were excessive, in working up against the stream, and carrying the canoes over shallow places in the river. Mr. Stibbs and his people got back to their ship, after an absence of two months and twenty-three days. He gives this account of the condition of his crew,

THAT although, at his setting out, some of them were feeble, yet they were fat, strong and well at their return, none died, he only had been sick; but, on the contrary, those he left behind, who had the whole vessel to breathe in, he found in great distress with the sickness.

THERE cannot be any fact more distinct in all its parts, than this one. We have a two-fold view of the blockade, in the

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the misery of the crew, before and at their setting out, and of those who were found in the ship at the return of the expedition; also nature's remedy for the calamity, in the condition of the men at their return from their labours. And in the case of Mr. Stibbs, there is a proof how impossible it is for a delinquent against the laws of his constitution to escape: he kept the journal, which necessarily confined him to his station; Mr. Drummond, who kept the accounts, by his office, was not confined to the canoe, and he was the only other person who could be exempted from hard labour.

It is ordinary for people coming from sea, to call for greens, when they arrive at any settlement; to this medicine, probably, and the effects of salt checking the progress of the superfluous matter, hoarded up amongst their blood, the advantage these men enjoyed may be ascribed, who were feeble when they set out, and recovered

of the PESTILENCE. 97

vered by the effects of violent perspiration, the fruit of their toils.

MR. ANSON'S failors, in the midst of their fatigue in passing Cape Horn, were cut down by the latent evil ; but they had no greens, and were also enduring the sixth month of their confinement in a cold climate.

WHEN we turn from the Gambia, to such situations at land, where the diet is fresh provisions, armies in general are all in a flame. The Fever and Dysentery, neither is to be taken off by greens, nor sweated off during violent labour ; for the breaking up of the winter quarters, and of an idle encampment, marks, upon every occasion, the whole tract of the march of an army, with human wo ; the young and the strong men fall, not like the dropping of ripe fruit from their stalks in the autumn, but they fall, like the fresh bough, with the green leaf, blown from the trees

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of

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of the forest, by the fury of a storm, never again to adorn the world.

FROM these examples, we shall consider the consequence of Famine, which has called forth the Pestilence, still more fatal to the human race, than the annual inundations of the Nile, sudden alarms amongst Christian cities, or perhaps the frosts in the North, and the miseries of war.

ALL Eastern famines, as has been observed, and which is well known, are occasioned by drought. The scarcity of corn in the British isles, has proceeded always from the effects of too much rain.

WE shall then draw into our view the bad consequence which followed crop 1756 in Scotland, as from it may be learned, in some degree, the situation of countries afflicted by great drought.

THE

of the PESTILENCE. 99

THE working people in Scotland earn about four shillings Sterling in the week; their principal food is oat-meal, sixteen pounds of it serves a man and his family seven days, which he buys, in a year of plenty, at a penny a pound weight; and the remainder of his wages, being thirty-two pence, he lays out upon other parts of food, and conveniencies less necessary; he also pays with it his house-rent. The price of meal, during the 1757, was, over Scotland, about two-pence a pound; therefore, his sixteen pounds of meal cost him thirty-two pence, so that sixteen pence only remained in his hands at the end of the week, which laid him under a necessity of purchasing fewer of the other conveniences of life. This circumstance occasioned a small consumpt of the manufactures of the country through that year, and every man concerned in the interior trade of Scotland felt the severe effects of bad crop 1756. Had the scarcity been greater, so as to have occasioned the price

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of meal to advance to three-pence a pound, or had other provisions, such as animal food, milk, butter, cheese, and vegetables, kept pace with grain, as must be the case when drought brings famine on the land, his four shillings would have been exhausted on food alone, and as no money remained in his hands, he could not have purchased other goods, the produce of his country, neither could he have discharged his house rent. As the fields in the East are burnt up every drouthy year, these nations at once must be reduced to extreme poverty, in which the landed interest are deeply involved ; for the farmers, grassiers and gardeners, receiving no produce from the ground, they are not in a capacity to pay their rents : therefore, when all that money, the bulk of every nation have in years of plenty to lay out with the dealers, is exhausted on the mere necessities of life alone, and the better sort themselves are reduced to poverty, the merchant, in such years, not finding his customers

of the PESTILENCE. 101

customers buying as usual, immediately stops purchasing goods of the tradesmen, which directly deprives them of the means of prosecuting their ordinary labours.

THE sufferings of the people in Scotland were severe during the late scarcity, but their distress bore only a faint resemblance of the miseries of eastern nations in barren years ; for they groan under the weight of despotic sway, which rarely bends to the cry of the needy. Britain was enjoying the blessings of liberty, under a government attentive to supply the wants of her people. Our manufacturers were supported, not only by interior, but also by foreign consumption, which ignorant nations have not. Scotland was covered with verdure, the effects of a wet season, the countries in the East are burnt up by the drought ; therefore, when their gardens produce no fruit, and the fields neither grass to mow, nor corn to be cut down, when the tradesmen, unsupported by foreign consumption, are dismissed

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missed from their labours, as no money remains with the bulk of the people to purchase the works of their hands, these nations are, in such years, by the dire effects of famine, thrown suddenly into a state of total inaction, the labourious in town and country no longer enjoying that seasonable relief, by a great degree of perspiration above the natural, which their constitutions demand, and constant labour procures; they, with all other nations that ever were driven into this situation, as it is the same in which we beheld these multitudes fall, have been hitherto destroyed, and must necessarily, in times to come, perish by the Pestilence*.

FROM

* THE London Gazettes of April 18. May 23. and July 15. 1758, gave an account of the miseries the Turks were labouring under from the dearth of provisions. And later accounts informed us of the progress of the fever in that empire, which greatly alarmed Europe.

WHOEVER is desirous of more facts concerning the progress of the Pestilence, should look over, or recollect passages in history, where labour has been interrupted. The
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of the PESTILENCE. 103

FROM these scenes of human wo, we descend to the brute creation, in order to view their state, and compare it with that of the higher rank of beings.

THE dog enjoys animal and vegetable food with his master; he shares also in his action and inaction: his heat is the same, and the structure of his animal œconomy too is nearly the same: for as the dog does not perspire through the skin, it goes out by his mouth. We ought then to find in the history of the kennel, the sum total of these human calamities, or learn the means by which they are prevented from taking place.

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confusion the late earthquake at Lisbon occasioned in that city; the invasion the licentious French made in Hanover, the beginning of the year 1758, threw the people into that situation, and produced the fever; and travelling on in this tract, an universal scene of death will occur. History informs us, that one half of the human race perished by the Pestilence in the course of five years in the middle of the fourteenth century: and every fact that has been stated, serves to prove the same extent of misery may again befall the world in five, six, or eight months.

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A PACK of dogs, when they run in corn countries, are taken off from their labours about the beginning of April. The feverish months are June and July. The careful huntsman observes to give his dogs half meat only, and that cold; he bloods them in June, he bathes them frequently, (a method that great advantage has been reapt from on ship-board*,) and he gives them all the fatigue he can devise. These are the usual methods observed in the kennel; and the sure consequences of a total neglect in the huntsman, in case the dogs have run hard during the season, proves the ruin of the pack by the fever: but the dogs that run through the whole year need no part of this care, neither do those who are left in the houses of the farmers and others, to the freedom of their instinct,
for

* SEE Captain Lathem's letter of the Tyger man of war, dated Madagascar September 9. 1754, published in the Gentleman's magazine of April 1755. He made his men bathe every day in the sea, nine only were sick in his ship, whereas a ship of war, of equal numbers, that sailed in company with him, had two hundred sick, they not observing Capt. Lathem's method.

of the PESTILENCE. 105

for they run through the night and in the mornings of their own accord.

FROM the faithful dog, we may notice a fact that concerns the horse, another companion of mankind.

PLUTARCH observes, in his life of Eumenes, that this hero, blockaded in the little castle of Nora, in Capadocia, by the troops of Antigonius, was in danger of losing his horses for want of exercise. The greatest room in the place measured only twenty-one feet in length, therefore he ordered them to be tied up by the head, with strong ropes, to the roof of the apartment, until their forefeet just touched the ground. The grooms lashed them at stated times, until they were all in a foam. By these means, we may believe, Eumenes preserved his horses from the fever. These horses, that are wrought severely at times, are generally put to grass during their inactive season, which

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holds them in a state of continual purgation.

FROM the quadrupeds that are under the management of men, we pass to others left wholly to the freedom of their instinct; and we find the hand which deprives these animals of their labours, that rest and sleep through the winter, also deprives them of their ordinary food *.

IT would be happy for the country-people of Egypt, and for others reduced to their annual situation, during the inundation, if they would imitate the sportive dog, left to his freedom; because nature does not allow that men should be deprived of food, as is the case with the sleepers; for, like the dog, they have their ordinary food; but rejecting the example of that quadruped, (who like them is formed for labours,) and ignorant of their impending fate, they unhappily fold their hands,

* The bear, sand-swallow, &c.

of the PESTILENCE. 107

hands, shut their eyes, and go to rest, like those animals that sleep for a season.

By these proofs it appears, the active gentleman and the labourer have no more a right to indulge in the indolent situation of the first, than these have to enjoy the exercise of the second, or endure the labours of the third class.

THE punishment of the active and labourious, has, and must ever prove sure and fatal, and the enjoyment of exercise, and far more the performance of labour to the latter, is impossible; because, as has been observed in part II. the straitness of their larger blood-vessels will not suffer their natural quantity of blood to circulate, and them to breathe, during such attempts.

To remedy these evils, while the indolent are enjoying their relief by natural perspiration, in their usual station, the active gentleman should enjoy his relief by

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that degree of perspiration above the natural which his ordinary exercise procures; and the labourer should take that great degree of perspiration he requires, by continuing his daily toils, wherever his station may be fixed. If the Christian nations would hope to escape the Pestilence, supposed hitherto to have come from the Turkish empire, they must have no greater dread of an Egyptian fever than for those of European growth; that is, the timid ought to keep ten or twenty yards from the presence of any evil; or if they chuse to fly further off, their labours should accompany them. As every nation would wish to preserve the brave from the ordinary miseries which have desolated fleets, and thinned the ranks of armies, rendering war itself destructive beyond description, it would seem, that an article should be added to the present articles of war, by which the sea and land captains may be made answerable for the lives of their men; for they may enjoy every
where

of the PESTILENCE. 109

where full perspiration by the performance of a dance, or other manly exercise, (and it is in their power to keep at a little distance from scenes of great distress.) The princes of the east, in time of famine, and those of the north, during the severity of the winter, ought to require of their people the regular performance of some kind of labour. The nations particularly bordering upon the Nile, during the overflow of that river, in imitation of their ancient fires, should rear monuments of human grandeur, for the world to gaze on, to consider and admire. Happy had it been for the Egyptians in Grand Cairo, who died during the inundation 1580, had they been digging the grand canal projected of old *. The merchants trading in slaves along the African coast seem to have a cheap remedy in their power, by which shoals of negroes may be preserved, who must otherwise be destroyed in times to come, as they have been hitherto, before they arrive

* A scheme to join the Mediterranean with the Red-sea.

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rive in the sugar islands. That race of people have been remarkably fond of music and dancing through all ages, they, no doubt, might be easily brought to enjoy this cheap amusement on the deck, and its effects, a sweat, at stated times, when the weather proved favourable; and when the violence of the winds, or a high sea did not suffer them to stand above, they could have their dance and music in the hold.

IN Part I. we stated the established theories which concern the primary cause of these calamities; and finding, upon a comparison of various evidence, that it did not exist in the air, in climate, or in diet, as has been universally imagined, we sought for it therefore in the human frame itself. In Part II. we divided mankind into three classes, *viz.* indolent, active, and laborious, which gave an opportunity of considering the effect of the motion of the heart and lungs upon the blood-vessels, during

of the PESTILENCE. III

during inaction, exercise, and labour. A lodgment for the reception of a quantity of inactive matter was discovered in the vitals of the active and laborious, which important and dangerous circumstance, existing in the human frame, seemed to demand daily a degree of perspiration above the natural, to rid the constitution of it, and that in proportion to the condition of each class. In Part III. we were led to consult historical evidence, in order to be informed how this cause should operate; and from the uniformity of these great though dreadful events that have befallen the human race, in every quarter of the globe, as often as exercise and labour have been interrupted, we are led to conclude, that the original cause of the Pestilence, according to that extensive appellation with the ancients, is this superfluous matter obstructed: so that the various names this disease has received in latter ages, of *True Plague*, *Camp Fever*, *Dysentery*, *Black Scurvy*, &c. seem to belong to the same misery, and may be prevented

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prevented from taking place, if we yield
obedience to the calls of nature.

IF any thing better is fallen on by others,
this essay should be rejected: truth, not
victory, the preservation of men, and not
the name of a discovery, engaged us in this
inquiry, and were our favourite objects.

Nota, WE have had no intention in this inquiry to consider
the effects of climate upon tender people, nor the difference
betwixt the air of town and country, no more than the dis-
eases which particular persons are subject to, nor what food is
best; neither has it any connection with other epidemics and
their origin, such as Small-pox, Measles, Chincough, &c. more
than with the reigning evil among the horned cattle. The
facts stated serve to prove, that the hot climate of the West-
Indies is more favourable for the lower class of mankind, when
reduced to a state of inaction, than the northern climates of
Europe and America; and during that situation, the effects of
salt food is manifestly favourable: for when the diet is fresh,
men die in a few days, but when it is salted, the sickness takes
often several weeks to kill, and gives them a chance to re-
cover by the effects of greens, &c. Yet although these facts
serve to prove this much, we would not be understood to say,
that the climate of Jamaica is equally favourable to the
people of Britain with that of their own country, or that
salt food is as natural a nourishment as fresh; the numerous
accidents that have befallen Europeans settled in Asia, Africa,
and the sugar islands, and the shattered constitutions the few
who survive bring home, shews, that men are like trees, they
thrive best in their native land.

A P P E N D I X.

N U M B E R I.

From Prosper Alpinus de Med. Egypt.
lib. 1. c. 15.

PLERUMQUE pestilens contagium
in Egyptum ex multis locis peste in-
fectis asportari solet; rarissimeque ab
aeris vitio pestis illa nascitur. Et hoc non
nisi ubi Nilus immodice ea loca inundat,
atque etenim longiore tempore terram
occupante fit ut universum illud solum lacus
evadat palustris ac stagnans, qui, accedente
primæ æstatis calore austrino, multo infig-
norem recipit putredinem, vel aer illorum
locorum suapte natura calidus et ficcus flu-
minis larga. Nili inundatione perseverante
immodice humidus redditur, quod aeris tem-
peramentum ad gignendum pestilentiam esse
P valde

valde opportunum ac facile, Gal. in 1 lib. de temp. memoriæ prodidit. Ab halitibus vero putridis ac corruptis palustrium locorum Egypti, lacuumque aquarum corruptarum, singulis annis, si multi essent immodicas fluminis inundationes aliquando ibi factas, pestis annis singulis ibi ex aere fieret. Ex caliditate aeris immodica pestilentiam obortam fuisse nemo hætenus ibi vidit; quæ vana credulitate omnem pestiferum morbum negligunt atque parvi faciunt, nihilque ab eo timent, pro certo credentes si illis vitam eo morbo finiendum destinatum sit, quin ab eo moriantur nullo pacto ipsos posse effugere, neque in bello, neque in mare, neque alio modo mortem sibi pertimescendam. Atque hinc, peste Egyptum depopulante, urbem Cayrum sævissime depascente, nemo ipsorum in ipsa fugam arripit, neque una cum peste infectis versari timet, neque vestibus, aliisque laneis lineisque pannis, pestis contagio infectis, uti abhoret. Vestes enim, aliaque peste interremptorum defunctorumque suppellectilia, subito in emporiis publice

publice venduntur; et, quod magis mirum videtur, quisque ea emit absque ullo pestilentis contagii timore. Quæ sane lues nullo pacto aliis formidata, cum de ipsius contagio nulla habeatur ratio apud ipsos: fit vehementissima, sævissimaque per universam urbem citissime expanditur et diffeminatur, tantamque tyrannidem in ipsos ac stragem exercet ejus contagio ob hominum hac in re negligentiam in plurimos propagato, mirumque etiam in modum aucto, ut Cayri anno a virginis beatissimæ partu 1580, sex septemve tantum mensium spatio quingenta millia hominum, ut audio, peste perierint. Hoc boni habent ibi peste infecti atque ægroti, quod a nullis deferuntur, quinimo medici omnes peste correptis libere non secus quam aliis in omnibus morbis medentur, citraque ullum timorem astante ipsorum curam habent, non secus quam ægrotis ab alio salutare, minimeque contagioso, morbo facerent.

N U M B E R I I .

From Dr. Mead on the Pestilence,
Page 31.

THROUGH the midst of Grand Cairo passes a great canal, which is filled with water at the overflowing of the Nile ; and after the river is decreased, is gradually dried up. Into this the people throw all manner of filth, carrion, &c. so that the stench which arises from this, and the mud together, is insufferably offensive. In this posture of things, the Plague every year constantly preys upon the inhabitants, and is only stopt when the Nile, by overflowing, washes away this load of filth ; the cold winds, which set in at the same time, lending their assistance, by purifying the air.

N U M-

NUMBER III.

From Prosper Alpinus, lib. i. c. 14,

ALLEXANDRIÆ autumnno grassantur febres pestilentes, multæ læthales, quæ fere quam plurimos invadunt, cum urinis pulsibusque et calore febrili usque adeo parum a naturali statu mutatis, ut sæpe medicos atque ægrotos decipiant. His vero notis plæreque dignoscuntur, in principio enim vomitus multi bibliosæ ac virulenti observantur, a quibus cibum assumptum continere nequeunt; assiduisque corporis agitationibus, inquietudinibusque vexantur; stomachique angore anguntur. In plerisque etiam observantur multæ symptomatice dejectiones liquidæ bibliosæ, variæ admodum ægreolentes sive fætentes. Plures cibum abhorrent, neque valde sitiunt, et si linguæ ipsis sint siccæ asperæ et nigræ. Incolæ quam advenæ difficiliter corripiuntur, atque ab his intereunt.

NUM-

NUMBER IV.

From Dr. Mead on the Plague,
page 32.

IN Ethiopia, those prodigious swarms of locusts, which at sometime causes a famine, by devouring the fruits of the earth, unless they happen to be carried by the winds clear off into the sea, are observed to entail a new mischief upon the country, when they die and rot, by raising a Pestilence.

NUM-

NUMBER V.

A Journal of what passed in the city
of Marseilles, &c. page 291.

THE coasts of the Levant being likewise suspected of the Plague, all ships which come from thence for Marseilles stop at the islands of Chateaudif; and the intendants of health regulate the time and manner of their quarantines, and of purifying their cargoes, by the tenor of their patents, (or bills of health,) and by the state of health of the particular places from whence they come.

THE beginning of May 1720, we had advice at Marseilles, that from the month of March the Plague was rife in most of the maritime towns, or trading ports of Palestine and Syria.

THE

THE 25th of the said month of May, the ship commanded by Captain Chataud, which came from thence, that is to say, from Sidon, Tripoli, Syria, and Cyprus, arrives at the said islands; but his patents are clean, (*i. e.* his certificates imported there was no contagion at those places,) because he came away the 31st of January, before the Plague was there. He declares, however, to the intendants of health, that in his voyage, or at Leghorn, where he touched, six of his crew died; but he shews, by the certificate of the physicians of health at Leghorn, that they died only of malignant fevers, caused by unwholesome provisions.

THE 27th of May, one of his sailors dies in his ship.

THE 28th, the intendants cause the corpse to be carried into the infirmary. Guerard, chief surgeon of health, views it,

it, and makes report that it has not any mark of contagion.

THE 29th, the intendants settle the purifying of the goods of this cargo to forty days compleat, to be reckoned from the day the last bail shall be carried from it into the infirmaries.

THE last of May, three other vessels arrive at the same islands, *viz.* two small vessels of Captain Ailland's from Sidon, whence they came since the Plague was there, and Captain Fougue's bark from Scanderoon.

THE 12th of June, Captain Gabriel's ship arrives there likewise from the same places, with a foul patent. (*i. e.* importing that the Plague was there.)

THE same day the officer, whom the intendants had put on board Captain Chataud's ship, to see quarantine duly performed,

TO A P P E N D I X.

formed, dies there; Guerard, chief surgeon of health, views the body, and makes report that it has not any mark of contagion.

THE 14th of June, the passengers, who came in the said ship, are perfumed for the last time in the infirmaries, and are allowed to enter the city as usual.

THE 23d, being the eve of St. John Baptist, the Grand Prior arrives at Genoa with the king's gallies; the sheriffs have the honour to welcome him, and I to make a speech to him in the name of the city.

THE same day a cabin boy of Captain Chataud's ship, a servant employed at the infirmaries in purifying the goods of the ship, and another who was purifying the goods of Captain Gabriel's ship, fall sick; the same surgeon makes report that they have not any mark of contagion.

THE

A P P E N D I X. I I

THE 24th, another servant, employed to purify Captain Ailland's goods, falls sick likewise, is visited, and the same report made.

THE 24th and 26th, all four die one after another, their bodies are viewed, and report made that they have not any mark of contagion.

NOTWITHSTANDING the reports thus made, the intendants consult, and resolve, by way of precaution, to cause all these bodies to be buried in lime, and remove from the island of Pomegue the ships of the Captains Chataud, Ailland, and Gabriel, and send them to a distant island called Jarre, there to begin again their quarantine, and to inclose the yard where their goods are purifying in the infirmaries, without suffering the servants, employed to air them, to come out.

THE 28th of June, another vessel, bearing Captain Gueymart's bark from Sidon, arrives at the aforesaid islands, with a foul patent.

THE 1st of July, the intendants pass a resolution, to cause all the vessels, which were come with foul patents, to anchor at a good distance off the island of Pomegue.

THE 7th of July, two more servants, shut up to purify in the infirmaries the goods brought by Captain Chataud, fall sick, the surgeon finds tumours in their groins, and says in his report, that he does not believe however it is the Plague. He pays for his incredulity, perhaps for not rightly understanding the distemper, by dying himself soon after, with part of his family.

THE 8th, another servant falls sick, the surgeon finds a swelling in the upper part of the thigh, and then declares he takes it
to

to be a mark of contagion, and desires a consultation.

IMMEDIATELY the intendants call three other master surgeons to visit the said servants; their report is, that they have all certainly the Plague.

THE 9th, those patients die, they are burried in lime, and all their apparel is burnt.

THE intendants resolve to cause all the goods of Captain Chataud's cargo to be taken out of the infirmaries, and sent to be purified on the island of Jarre, and they repair to the town-house, to acquaint the sheriffs with what has passed.

THE matter appearing to be of consequence, they write about it to the council of Marine, and to the Marshal Duke de Villars, governor of Provence, and M. Estelle. One of the chief sheriffs, with two intendants

dants of health, are deputed to go to Aix, to give an account of it to M. Lebret, first president of the parliament, and intendant of justice and of commerce.

THE same day M. Personell and his son, physicians, come to the town-house, to give notice to the sheriffs, that having been called to a house in the square of Linche, to visit a young man, named Eissalene, he appeared to them to have the Plague.

THAT instant guards are sent to the door of that house, to hinder any one from coming out of it.

THE 10th of July that patient dies, and his sister falls sick; the guard is doubled; and it being judged proper to carry both off, to do it the more quietly, and without alarming the people, it is delayed till night; when at eleven o'clock M. Moustier, another of the chief sheriffs, repairs thither without noise, sends for servants from the infirmaries,

infirmaries, encourages them to go into the house; and they having brought down the dead and the sick, he orders them to carry them in litters without the town to the infirmaries; causes all persons belonging to the house to be conducted thither likewise; accompanies them himself with guards, that none may come near them, and then returns to see the door of the house closed up with mortar.

THE 11th, notice is given that one Boyal is fallen sick in the same quarter of the town. Physicians and surgeons are sent to visit him; they declare he has the plague; his house is instantly secured by guards, and when night is come M. Moustier goes thither, sends for the buriers of the dead from the infirmaries, and, finding the patient was newly dead, causes them to take the corpse, accompanies it, sees it interred in lime; and then returns to remove all the persons of that house to the infirmaries, and the door to be closed up.

THE

THE 12th, all this is told to the Grand Prior, who still remains at Marseilles; the first President is writ to; the intendants of health is assembled, to cause all the vessels come from the Levant with foul patents to go back to the island of Jarre, and all their goods that remain in the infirmaries to be removed thither likewise. M. Audimar, one of the sheriffs, presided in their assembly, to influence them to pass this resolution.

THIS and the following day, the sheriffs make very strict inquiry in the town, to discover all persons who had communication with these dead or sick of the plague; the most suspected are sent to the infirmaries, and the others confined to their houses.

THE 14th, they write an account of what has passed to the council of Marine; they resolve not to give any more patents, (or certificates of health,) to any vessel, till they can be sure the distemper is over.

THE

THE 15th, left from this refusal to give certificates of health, it should be believed in foreign countries that the Plague is in Marseilles; and lest this should intirely interrupt all commerce, they write to the officers, conservators of health at all the ports of Europe the real fact, that is to say, that there are several persons ill of the contagion in the infirmaries, but that it has not made any progress in the city.

THE 21st of July, nothing of the Plague having since been discovered in the town, they write it with joy to the council of Marine; and continue to provide whatever is necessary in the infirmaries for the subsistence of suspected persons whom they have sent thither, and of those whom they have confined to their houses.

ALREADY the public, recovered from their fright, begin to explode as useless the
R trouble

trouble the sheriffs had given themselves, and all the precautions they had taken; 'tis pretended the two persons that died in the square of Linche were carried off by quite another distemper than the Plague: the physicians and surgeons are upbraided with having by their error alarmed the whole town. Abundance of people are observed to assume the character of a dauntless freedom of mind, who are soon after seen more struck with terror than others, and to fly with more disorder and precipitation, their boasted firmness quickly forsaking them. The truth is, the Plague is to be feared and shunned.

THE 26th of July, notice is given to the sheriffs, that in the street of Lesealle, a part of the old town inhabited only by poor people, fifteen persons are suddenly fallen sick: they dispatch thither physicians and surgeons; they examine into the distemper, and make report, some that 'tis a malignant Fever, others a contagious or pestilential

pestilential Fever, occasioned by bad food, which want had long forced those poor creatures to live upon: not one of them says positively it is the Plague. A man must indeed have been very well assured of it to say it, the public had already shewed a disposition to resent any false alarm.

THE sheriffs do not rest wholly satisfied with this report, but resolve to proceed in the same way of precaution, as if those sick were actually touched with the Plague; to send them all without noise to the infirmaries, and for the present to confine them in their houses.

THE 27th, eight of those sick die; the sheriffs themselves go to their houses to cause them to be searched; buboes are found on two of them; the physicians and surgeons still hold the same language, and impute the cause of the distemper to unwholesome food. Notwithstanding which, as soon as the night comes, M. Moustier re-

pairs to the place, sends for servants from the infirmaries, makes them willingly or by force take up the bodies with all due precautions; they are carried to the infirmaries, where they are buried with lime; and all the rest of the night he causes the remaining sick, and all those of their houses to be removed to the infirmaries.

THE 28th, very early in the morning, search is made every where for those who had communication with them, in order to confine them. Other persons in the same street fall sick, and some of those who first sickened die. At midnight M. Estelle, (who was come back from Aix,) repairs thither; causes the buriers of the dead at the infirmaries to attend; makes them carry off the dead bodies, and bury them in lime; and then, till day break, sees all the sick conducted to the infirmaries.

THE people who love to deceive themselves, and will have it absolutely not to be

be the Plague, urge a hundred false reasons on that side. Would the Plague, say they, attack none but such poor people? would it operate so slowly?

LET them have but a few days patience, and they will see all attacked without distinction, with the swiftest rage, and the most dreadful havoc that ever was heard of.

SOME obstinately contend, that the distemper proceeded wholly from worms: but while they pretend to argue so confidently, trembling with fear in their hearts, they make up their pack to be readier to fly. What all others are doing I leave to be imagined; every one has taken the fright, and is ready to run out of the town to seek refuge any where.

IN the mean while, the distemper continuing in the street of Lescalle, the 29th of July and ten days after successively, the
sheriffs

sheriffs are obliged to give nightly the same attendance, and in the day-time to make continual search after all those who had communication with the dead or sick. People fall sick in several other parts of the town; they are confined in places by themselves by guards; some of them die; and every night M. Estelle and Moustier go by turns to see them carried off, to remove the rest to the infirmaries, and to fasten up or perfume houses; labours as dangerous as toilsome, especially when after having sat up, and staid all night in the street, they find themselves obliged to apply all the day, after a thousand other things no less troublesome.

M. AUDIMAR and Dieude, the other sheriffs, are fatigued on their part with continual care and pains, arising from the increase of necessary business in a town, where the common course of occurrences takes up the time the civil magistrate can bestow. M. Dieude, however, goes two nights together,

ther, to accompany the officers at the removing the dead and the sick.

THE marquis de Pilles, the governor, is perpetually co-operating with them all, he is every day, from morning till night, at the town-house, applying himself indefatigably to all that his zeal and prudence suggest to him, and to all that the maintaining of good order requires on such an occasion.

THE whole sum in specie at this time in the city treasury, is but 1100 livres ; and it is manifest, that if the city come to be thoroughly infected, all must perish for want of money. This obliges the sheriffs to write to the first president, to press him earnestly to be pleased to procure money for them.

BREAD-CORN, being scarce, is immediately run up to an exorbitant price ; to prevent therefore its being hoarded up to make
it

it dearer, an order is issued, at my instance, to forbid the hoarding it, on severe penalties. Two other ordinances are published at the same time, forbidding all persons to have and keep in the town, any thing that might contribute to the spreading of the contagion.

THE 30th of July, a general view and inventory is taken of all the provisions in the city, and the sheriffs finding hardly any bread-corn, meat, or wood, and little money in the treasury to buy stores with, all things excessively dear, disorder increasing, the populace as poor as frightened, all the persons of condition, and the rich already fled, they write to M. le Pelletier des Forts, and representing to him the deplorable condition of Marseilles, beseech him to intercede with his royal highness to grant them some supplies.

THE 31st of July, another ordinance is issued, at my instance, to oblige all strange
beggars

beggars to depart the city this day, and those settled in the town to retire into the hospital de la Charite, on the penalty of being whipped.

BUT this ordinance is not put in execution, because we learn the same day, that the chamber of vacations in the parliament of Aix, on the rumour that the Plague is in Marseilles, has published an arret, forbidding the Marseillians to stir out of the bounds of their own territory, the inhabitants of all the towns and places of Provence, to communicate with them, and all muleteers, carriers, and others, to go to Marseilles, for what cause, or under what pretext soever, on pain of death.

IN this condition, how could two or 3000 beggars, that were then in the city, be turned out of it? Not being able to pass beyond the limit of the territory, they would be constrained to stay there, and to ravage it for subsistence.

THE 1st of August, M. Sicard, father and son, physicians, come to the town-house, to tell the sheriffs, that it is not to be doubted the distemper in the city is really the Plague, but that they make sure account they shall put an end to it, if they will do what they shall prescribe, which is to buy up a great quantity of wood, brushes, and faggots, to lay them in piles at small distances along the walls of the town, and in all public walks, open places, squares and markets, to oblige every private person to lay a heap of them before his house, in all the streets in general, and to set them all on fire at the same time, in the beginning of the night, which will most certainly put an end to the Plague.

EVERY body being willing to make this experiment, and all the other physicians, who are called daily to the town-house to give an account of the progress of the distemper, not disapproving it, the sheriffs forthwith cause all the wood, faggots, and

and brushes, that can be found, to be bought up, and M. Audimar and Dieude go, with the utmost ardour, to see them placed along the walls, and in the public walks and places.

THE 2d of August, they publish an ordinance, commanding all the inhabitants to make each a bonfire before his house, and to light it at nine o'clock at night, the moment those along the walls and in the public places shall be lighted. This is executed. It is a magnificent sight to behold a circuit of walls, of so large, so vast extent, all illuminated; and if this should cure the city, it would certainly be cured in a most joyful and agreeable manner.

THE magistrates, who, to satisfy the public, and to avoid all reproach, make such experiments, cannot however sleep upon the success promised from them; prudence requires they should pursue proper measures, and not to be with-held by vain hopes. They write to the first president,

and desire him, since the roads are barricaded against them, to be pleased to dispatch for them a courier to the court, to represent their misery, and the inconveniences they have ground to fear, as being without a penny of money, while they are in dread of wanting every thing, and of having the calamity of famine superadded to that of the Plague.

THEY write to the council of Marine likewise, acquainting them what number of sick they actually have, and how many dead they have carried to and buried at the infirmaries.

THE same day, in the assembly held daily at the town-house, with the municipal officers, and such of the chief citizens as have not yet fled, M. de Piles presiding, it was resolved,

I. THAT whereas the number of the sick increases more and more, especially in
the

the street of Lescalle, a corps de garde shall be posted at every avenue of the street, to hinder any one's going into, or coming out of it ; and that commissaries of victualling shall be appointed to go and distribute provisions to the families inhabiting that street.

2. THAT all the captains of the city shall each raise a company of fifty men of the militia, to be paid by the city ; and that however, the five brigades, called the *Brigades du Privilege du Vin*, with their officers, shall serve every where as a guard to the sheriffs in their marches in the night, to see the dead and sick carried off to the infirmaries.

3. THAT the physicians and surgeons already employed, may be induced to serve with the greater diligence, and not to demand any fee of the sick, they shall have salaries from the city, and be allowed farrots
of

of oiled cloth, and chairs, for their more easy conveyance every where.

4. THAT seeing the city has no money, and that it must be indispensably had, advertisements shall be publickly affixed for taking loans of money at five *per cent.* to try to get some by that means; and that the treasurer not being able to come to reside at the town-house, M. Bouys, first clerk of the records, shall be cashier there.

THE 3d of August, the Marquis de Pilles, and the sheriffs, being reassembled with the same citizens, appoint 150 commissaries in the five parishes of the city, to look each in the quarter assigned him to the wants of the poor, to distribute to them bread, and other subsistence, at the charge of the city, and to do whatever else they shall be directed for the public good and welfare.

IN that part of the town, called the *Rive Neuve*, which lies beyond the port, and
extends

extends from the Abbay of St. Victor to the arsenal, the Chevalier Rose is appointed captain and commissary-general.

AND in the territory, (*i. e.* the country belonging to Marseilles,) which is like a vast city, there being above ten thousand houses called *Bastides*, in the forty-four quarters, and dependent parishes, of which it is composed, besides several pretty large villages, one Captain and some commissaries are appointed for each, to take the like care.

THE same day, for preventing communication among children, who, as it is said, are most susceptible of the Plague, the college and all the public schools are shut up.

As for the fires advised by the two Sicards they are forborn. Notice is given that these two physicians have deserted the city; besides, there is no wood, faggots,
or

or brushes to be had, but a quantity of brimstone is bought up, and distributed among the poor, in all quarters of the town, and the insides of all the houses are ordered to be perfumed.

IN the evening the Marquis de Pilles, and the sheriffs being still assembled in the town-house, notice is given them, that four or five hundred of the populace are got together in the quarter called *l'Aggrandissement*, and are very disorderly, crying out they will have bread; the bakers of that quarter, by reason of the scarcity of corn, not having made the usual quantity, so that many persons could not be served. The Marquis de Pilles, and M. Moustier hasten thither, followed by some guards; their presence puts a stop to the tumult, and they intirely appease the people, by causing some bread to be given them.

THE 4th, the officers of the garison of Fort St. John come to the town-house,
and

and acquaint the sheriffs, that they are in want of bread-corn, and desire a supply from them, declaring, that otherwise they cannot answer, that the troops of their garrison will not come into the city, and take corn by force. The sheriffs reply, that they would willingly furnish them, if they had stores sufficient; but the want themselves are in is so great, that they cannot do it; and if violence should be offered to the inhabitants, they would appear at their head to defend them.

THE same day it being taken into consideration, that the arret issued by the chamber of vacations having interdicted all communication between the inhabitants of the Province and those of Marseilles, if things should remain at this pass, and no body should bring in corn and other provisions, we should soon be reduced to the extremity of famine, the sheriffs resolve to have recourse to the first President. Accordingly they send to intreat him, to
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establiſh, as had been done formerly, markets, and barriers for conference, at certain proper places, whither ſtrangers, without being expoſed to any riſk, might bring us provisions : at the ſame time they write to the procurators of the country of Provence, to be pleaſed to concur therein. It is impoſſible certainly to exert more compaſſion to the miſeries of an afflicted city than they did, and particularly the conſuls of the ſeveral towns. Marſeilles will never forget the ſervices done her in this calamity, nor the kindneſs, zeal, and readineſs with which they were done.

THE ſame day, the ſheriffs conſidering the diſorders which often happen in a time of contagion, the neceſſity of uſing ſpeedy means to ſuppreſs them, and of making examples of malefactorſ and rebels; and that as often as the city has been viſited with the Plague, as in 1580, 1630, 1649, and 1650, our Kings have conſtantly granted to their predeceſſors, in the magiſtracy,
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by letters patents, the power of judging all crimes finally, and without appeal; they write again to the first President, desiring him to procure for them from his Majesty the like letters patents.

THE 5th, they repeat their instances to him, to get them supplied with corn: they write likewise to the same purpose to the consuls of Toulon, and to those of all the maritime towns of the coasts of Languedoc and Provence, proposing to go to receive the corn at any place distant from the town which they shall chuse to land it at; and they desire those of the town of Martignes to send vessels to Arles to fetch corn from thence.

THE 6th, an ordinance is published at my instance, forbidding all persons to remove from one house to another the moveables or apparel of the sick or dead, or to touch them, or make use of them, on pain of death. Another ordinance fixes

the rates of victuals and necessary commodities, to restrain the excessive price to which, because of the scarcity, those who would make advantage of the public misery would raise them.

THE 7th, the chamber of vacations having permitted the procurators of the country to come to a conference with the sheriffs, at a place on the road to Aix, called *Notre Dame*, two leagues distance from Marseilles, the Marquis de Vauvenargues, first procurator of the country, comes thither, accompanied by several gentlemen, and the principal officers of the province, attended by the Marshal de Villar's guard, and by a brigade of archers of the Marshalsea. A town afflicted with or suspected of the Plague, out of which even almost all the inhabitants are ready to run, cannot make a figure conformable to such honour. M. Estelle, one of the chief sheriffs, goes to the place, without retinue, without attendants, and without any guard, accompanied

accompanied only by M. Capus keeper of the records of the city, who, by his ability, probity, and application, is become the pilot, as it were, of this whole community.

AT this conference, where the precaution is used to speak to each other at a great distance, an argument is made, importing, that at that place a market shall be established, where a double barrier shall be fixed; and that another market shall be settled at the sheep-inn, on the road to Aubagne, which is likewise two leagues from Marseilles; another for vessels bringing provisions by sea, at a creek called Lestague, in the gulph of the island of Marseilles; and that at all these markets and barriers, the guards shall be placed by the procurators of the country, and paid by the sheriffs of Marseilles.

THE 8th, this agreement is confirmed by an arret of the chamber of vacations:
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in consequence of which, the sheriffs write to all the consuls of the towns and places of Provence, pressing them to send, with all expedition, corn and other provisions, wood and coal, to these markets and barriers, where all shall be transacted without communication.

THEY apply themselves the same day to the drawing up of general instructions, in which they specify all the duties the commissaries, whom they have already appointed, are to perform, for relieving the poor, and taking care of the sick.

IN the mean time, it being evident that M. Estelle and Moustier, who hitherto have sat up by turns every night, to see the dead, sick, and suspected carried to the infirmaries, and houses fastened up or perfumed, cannot possibly undergo such fatigues much longer, especially the distemper beginning to break out in divers quarters of the town, far distant from each other,

other, although M. Audimar and Dieude offered to relieve them, the Marquis de Pilles judging it necessary they should manage their health and life, it was resolved in the assembly,

1. THAT carts shall be used to carry off the dead; that all the sturdiest beggars who can be found, shall be seized, and made buriers of the dead; that four lieutenants of health shall direct them, and M. Bonnet lieutenant to the governor shall command them.

2. MEN shall forthwith be set to work to dig large and deep pits without the walls of the town, in which the dead shall be buried with lime.

3. A pest-house or hospital shall be immediately established. The Hospital de la Charite is first thought of; but the difficulty of removing out of it, and lodging elsewhere, above 800 of both sexes who are
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in it, renders it necessary to resolve upon that des Convalescens, which is near the walls of the town, on the side of the gate of St. Bernard du Bois.

THE 9th of August it is observed, that some physicians, and almost all the master-furgeons are fled. An ordinance is issued at my instance to oblige them to return, on the penalty to the former of being expelled for ever from the college of their faculty, and to the latter of being expelled the company of furgeons, and of being proceeded against extraordinarily.

ANOTHER ordinance is published at my instance, forbidding butchers when they flea and cut up beef or mutton at the slaughter-house to blow it up with their mouth, by which the Plague might be communicated to the meat, but to make use of bellows on pain of death.

ANOTHER

ANOTHER forbidding bakers to convert into biscuit the meal the city gives them to make bread of for the poor, or to make any wheat-bread, in order to prevent their bolting the meal designed for the poor's bread.

AND another forbidding all persons to divert the public waters for overflowing their grounds, that the conduits may not become dry, but that water may run the more plentifully through all the streets of the city, to carry off the filth.

THIS day and the following it is found not a little difficult, to get all that had been resolved upon the day before put in execution: carts, horses, harness, are wanted; they must be had from the country, and no person will furnish them to serve to carry infected bodies. Men are wanted to harness the horses, to put them to the carts, and to drive them, and every one abhors lending a hand to so dangerous a

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service. Buriers of the dead are wanted to take them out of the houses; and though excessive pay be offered, the poorest of the populace dread such hazardous work, and make all possible efforts to shun it. Peasants are wanted to open the pits, and none will come to dig, such a fright and horror has seized them. The sheriffs are obliged to exert themselves to the utmost, to get some by management, and others by force and rigour.

To put into order, as speedily as is requisite, a pest-house, and to furnish it with all necessaries, which are almost numberless, is a task no less perplexed with difficulties. The hospital des Convalescens, which was resolved to be made use of, is found to be too little, it is necessary to enlarge it, by joining to it a building called the Jas, which stands very near it: a thousand things are to be done, and yet none could easily be made to stir about them: M. Moustier is obliged to repair thither, and to abide upon

upon the spot; and by keeping hands at work night and day, he makes such expedition, that in forty-eight hours he gets it up in order, all necessaries sorted and laid ready, and the whole made fit to receive the sick.

A very great difficulty still remains, which is, to find stewards, overseers, cooks, and other lower officers, and especially so great a number of servants as are requisite to tend the sick. Advertisements are affixed throughout the city, to invite those sordid creatures whom avarice draws into dangers, or those of better minds, whom superabundant charity disposes to devote themselves for the public; and by seeking such out, by encouraging, giving, and promising, they are procured: apothecaries and surgeons are engaged, and two physicians, strangers, named Gayen, come in voluntarily and offer their service, and to be shut up in the hospital. Unhappily death puts an end too soon to their charity and zeal.

THREE pits of sixty foot long, as many broad, and twenty-four deep, are begun at once without the walls, between the gate of Aix and that of Joliette: to compel the peasants to work at them M. Moustier is obliged to keep with them daily, exposed to the heat of the sun.

THE Chevalier Rose appointed Captain and commissary-general at the Rive Neuve, beyond the port, does the same: he puts into proper order another vast hospital, under the shades of a rope-yard, causes large and deep pits to be dug near the Abbay of St. Victor, gets together carts, buriers of the dead, and all persons needful to look to the living, the dying and the dead; and, what is no less remarkable than his activity, his courage and his zeal for his unfortunate country, he furnishes, out of his own purse, the great expences necessary for maintaining that hospital, and the many hands he employs, without troubling

troubling himself when and how he shall be reimbursed.

No sooner are these pest-houses in any readiness to receive the sick, but in less than two days they are quite filled, but are not long so by those who are carried thither. The distemper is so violent, that those who are brought in at night are carried out next day to the pits, and so the dead make room every day successively for the sick.

THE 12th of August, M. de Chicoyneau and Verney, the chief physicians of Montpellier, arrive at the barrier of Notre-dame, to come and examine, by order of his royal highness, the true nature of the distemper that afflicts this city. Lodgings are made ready for them, and a coach is sent to bring them hither from the Barrier.

THE 13th, the Marquis de Pilles, and the sheriffs invite them to the town-house, whither they had summoned all the physicians

cians and master surgeons of the city: after they had conferred a long time upon the symptoms of the distemper, they agree among themselves, to go together the following days, to visit, as well the sick in the hospitals, as those in the several quarters of the town, and to make such experiments as they should judge proper.

HITHERTO the distemper has not exerted all its rage: it kills indeed those it seizes, hardly one escaping; and whatever house it enters, it carries off the whole family; but as yet it has fallen only on the poorer sort of people, which keeps many persons in a false notion, that it is not really the Plague, but proceeds from bad diet, and want of other necessaries. Those who use the sea, and have frequently seen the Plague in the Levant, think they observe some difference: in short, abundance of people still remain in doubt, and expecting, with the utmost impatience, the decision of the physicians of Montpellier,

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to determine them whether to stay or fly.

THE 14th, the sheriffs write to the council of marine, most humbly to thank his Royal Highness for his care and goodness, in sending to them these physicians.

THE 15th, they write to the Marshal de Villars, to acquaint him with the condition of the city, and the extreme want it is in, having near 100,000 souls in it, without bread and without money: they write likeways to M. de Bernage, intendant in Languedoc, and to the Marquis de Caylus, the commanding officer in Provence, then in Montpellier, to desire them to procure them bread-corn to preserve them from famine, which they had no less reason to fear than the Plague. The Marquis de Caylus has the goodness to engage his own credit for procuring them a good quantity,

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THE 16th, being the festival of St. Roch, which has at all times been solemnized at Marseilles, for imploring deliverance from the Plague, the Marquis de Pilles, and the sheriffs, for preventing communication, would have the proceßion usually made every year, in which the bust and relicks of that saint are carried, be now forborn ; but they are obliged to yield to the outcries of the people, who become almost raving in matters of devotion, when they are under so terrible a scourge as the Plague, whose dire effects they already feel ; they even judge it convenient to assist at the proceßion themselves, with all their halbardiers and guards, to hinder its being followed by a crowd, and to prevent all disorder.

THE 17th, the phyicians of Montpellier come to the town-house, to acquaint the sheriffs with what they have discovered of the nature of the distemper, and in plain words declare it to be certainly the Plague.

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N U M B E R VI.

From Dr. Mead's Preface, page 23.

AS the poorer sort of people subsist by their daily labour, no sooner shall the Plague have broke out amongst them, but the sick families, and all their neighbours likewise, if not relieved by the public, shall be abandoned to perish by want, unless the progress of the distemper put a shorter period to their lives.

THIS observation, that the Plague usually begins among the poor, was the reason why I did not make any difference in my directions for removing the sick, in regard to their different fortunes, when I first gave my thoughts upon this subject; which, however, to prevent cavils, I have at present done; and have shewn what method ought to be taken, if, by some unusual chance, the Plague should at the beginning enter a wealthy family.

NUMBER VII.

From Dr. Pringle's Preface.

THE diseases of the army have, as far as it appears, been treated of by none of the antient physicians; nor have we any information about them from the historians, unless when some very uncommon or fatal distemper attended an expedition.

THUS Xenophon, in his relation of the famous retreat of the Greeks, mentions their being liable to the *Fomes Canina*, to a blindness, and to a mortification of the extremities from the snow, and excessive cold they were exposed to on their march. Pliny, the naturalist, first takes notice of the Scurvy, which afflicted the Roman army in Germany, after continuing two years in that country; and we likewise find,

find, that the Romans were sometimes under a necessity of removing their camps, on account of the bad air of the adjacent marshes. Plutarch observes, that, after a famine, Demetrius lost 8000 men by a Plague. Livy informs us of a like distemper that seized both the Romans and Carthaginians in Sicily: and Diodorus Siculus describes another Plague, attended with a bloody flux, which almost utterly destroyed the latter at the siege of Syracuse, and explains the cause of it in a full and satisfactory manner. But excepting these, and a few more instances, there remains no account of the diseases incident to the armies of the ancients. It may seem strange that Vegetius, in his Book de re Militari, should write a chapter containing directions how to preserve the health of soldiers, and yet not mention any sickness they were particularly subject to; and that he should speak of the physicians attending the camp, without taking notice

of the manner of disposing of the sick, whether in hospitals or otherwise.

THE silence of the ancients upon this article is the more to be regretted, that as war was their chief study, it is scarce to be doubted, but that the orders relating to the care of the sick, were no less perfect than the other branches of their military science. And whereas their troops were constantly in the field, and in very different climates, the physicians of those days had it greatly in their power to have furnished many useful observations on the nature of camp diseases, as well as about the proper method of treating them.

NOR has this deficiency been supplied, that I know of, by any of the moderns, unless by such as either were little, or not at all employed in the service, at least in the hospitals of an army; and who, on that account, cannot be supposed to have written better on this head, than that author
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on the art of war, who composed his treatise without having ever seen a campaign. So that after all, this part of medicine, which ought long ago to have been compleat, is still in a manner new; so little is a military life consistent with that state of tranquillity requisite for study and observation.

UPON my being first employed in the army, I soon perceived what little assistance I was to expect from books, and therefore I began to note down such observations as occurred, in hopes of finding them afterwards useful in practice. And having continued this method to the end of the war, I have since put those materials into order, and, with as much clearness and conciseness as I could, have endeavoured, from my own experience to supply, in some measure, what I thought so much wanting on this subject.

N U M B E R V I I I .

From Saxe's Reveries, Art. 3.

I CANNOT omit taking notice here of a custom established amongst the Romans, by means of which they prevented the diseases that armies are subject to from the change of climates; and to which also a part of that amazing success which attended them ought to be attributed. The German armies lost above a third upon their arrival in Italy and Hungary. In the year 1717 we entered the camp of Belgrade with 55000 men; it stands upon an eminence; the air is wholesome, the water good, and we had plenty of all necessaries; nevertheless on the day of battle, which was the 18th of August, we could muster only 22000 under arms, the rest being either dead or incapable of acting. I could produce many instances of this kind, which
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have happened amongst other nations, and can only be imputed to the change of climate; but the use of vinegar was the grand secret by which the Romans preserved their armies: for as soon as that was wanting amongst them, they became as much subject to diseases as we are at present. This is a fact that few perhaps have attended to, but which is, notwithstanding, of very great importance to all commanders, who have a regard for their troops, and any ambition to conquer their enemies. In regard to the manner of using it, the Romans distributed it by order amongst the men, every one receiving a sufficient quantity to serve him for several days, and pouring a few drops of it into the water which he drunk. To trace the cause of so salutary an effect is what I leave to the adepts in physic, contenting myself with having related a simple fact, the reality of which is unquestionable.

NUMBER IX.

From Cæsar's Commentaries, b. 3. c. 2.

THESE affairs, together with the Latin festivals, and the rest of the elections, took him up eleven days ; after which, having laid down his dictatorship, and left the city, he went to Brundisi, where he had appointed twelve legions, with all the cavalry, to meet him. But he found so few transports in the haven, they were hardly sufficient for carrying over twenty thousand legionary foldiers, and six hundred horse. This was the only thing Cæsar had need of, to enable him to put a speedy end to the war. Besides, those troops which went on board wanted recruiting ; for the wars of Gaul, and long marches from Spain, had killed a great many, and an unhealthful autumn about Brundisi and Apulia, with the change of so wholesome an air as that
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of Gaul or Spain, had made the whole army out of order.

THINK not *, Pompey, you are to engage the conquerors of Gaul and Germany; I was present at all these battles, and of my own certain knowledge can affirm, there are but few of that army now remaining; many have been killed, as must of necessity happen in so many conflicts; many were consumed by the Plague in Apulia; many have quitted their arms, and severals are left behind to guard Italy. Have you not been informed, that the cohorts of Brundisi consist of invalids? and the forces you now behold are composed of new levies raised in Lombardy, and the colonies beyond the Po: for the flower of Cæsar's army fell in the two defeats at Durazzo.

* Labienus's Speech, b. 3. c. 30.

NUMBER X.

From Anson's Voyage, b. 1. c. 2. p. 18.

ON the 18th of September the squadron weighed from St. Helens. p. 48. On the 20th of November the captains of the squadron represented to the commodore, that their ships companies were very sickly. p. 55. We moored at St. Catharines on Sunday the 21st of December.

CHAP. V. p. 56. Our first care, after having moored our ships, was to get our sick men on shore, preparatory to which each ship was ordered, by the commodore, to erect two tents, one of them for the reception of the diseased, and the other for the accomodation of the surgeon and his assistants. We sent about eighty sick from the Centurion, and the other ships I believe sent nearly as many, in proportion

portion to the number of their hands. As soon as we had performed this necessary duty, we scraped our decks, and gave our ship a thorough cleaning, then smoked it between decks, and after all washed every part well with vinegar. These operations were extremely necessary for correcting the noisome stench on board, and destroying the vermin; for, from the number of our men, and the heat of the climate, both these nuisances had increased upon us to a very loathsome degree; and besides, being most intolerably offensive, they were doubtless, in some sort, productive of the sickness we had laboured under for a considerable time before our arrival at this island.

CHAP. X. p. 139. Soon after our passing Streights le Maire, the scurvy began to make its appearance amongst us; and our long continuance at sea, the fatigue we underwent, and the various disappointments we met with, had occasioned its spreading to such a degree, that at the latter end of

April there were but few on board who were not in some degree afflicted with it; and in that month no less than forty-three died of it on board the Centurion.

BUT though we thought that the distemper had then risen to an extraordinary height, and were willing to hope, that as we advanced to the northward, its malignity would abate, yet we found on the contrary, that in the month of May we lost near double that number: and as we did not get to land till the middle of June, the mortality went on increasing, and the disease extended itself so prodigiously, that after the loss of above two hundred men, we could not at last muster more than six fore-mast men in a watch capable of duty.

THIS disease, so frequently attending long voyages, and so particularly destructive to us, is surely the most singular and unaccountable of any that affects the human body. Its symptoms are inconstant
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and innumerable, and its progress and effects extremely irregular; for scarcely any two persons have complaints exactly resembling each other, and where there hath been found some conformity in the symptoms, the order of their appearance has been totally different. However, though it frequently puts on the form of many other diseases, and is therefore not to be described by any exclusive and infallible criterions, yet there are some symptoms which are more general than the rest, and, occurring the ofteneft, deserve a more particular enumeration. These common appearances are, large discoloured spots dispersed over the whole surface of the body, swelled legs, putrid gums, and above all an extraordinary lassitude of the whole body, especially after any exercise, however inconsiderable; and this lassitude at last degenerates into a proneness to swoon, and even die on the least exertion of strength, or even on the least motion.

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THIS disease is likewise usually attended with a strange dejection of spirits, and with shiverings, tremblings, and a disposition to be seized with the most dreadful terrors on the slightest accident. Indeed it was most remarkable, in all our reiterated experience of this malady, that whatever discouraged our people, or at any time damped their hopes, never failed to add new vigour to the distemper; for it usually killed those who were in the last stages of it, and confined those to their hammocks who were before capable of some kind of duty, so that it seemed as if alacrity of mind, and sanguine thoughts were no contemptible prerogatives from its fatal malignity.

BUT it is not so easy to compleat the long roll of the various concomitants of this disease; for it often produced Putrid Fevers, Pleurifies, the Jaundice, and violent Rheumatic pains, and sometimes it occasioned an obstinate costiveness, which was generally attended with a difficulty of breathing:

breathing: and this was esteemed the most deadly of all the scorbutic symptoms. At other times the whole body, but more especially the legs, were subject to ulcers of the worst kind, attended with rotten bones, and such a luxuriance of fungous flesh, as yielded to no remedy. But a most extraordinary circumstance, and what would be scarcely credible, upon any single evidence, is, that the scars of wounds, which had been for many years healed, were forced open again by this virulent distemper. Of this there was a remarkable instance in one of the invalids on board the centurion, who had been wounded above fifty years before at the battle of the Boyne; for though he was cured soon after, and had continued well for a great number of years past, yet on his being attacked by the Scurvy, his wounds, in the progress of his disease, broke out afresh, and appeared as if they had never been healed. Nay, what is still more astonishing, the callus of a broken bone, which had been compleatly formed
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for a long time, was found to be hereby dissolved, and the fracture seemed as if it had never been consolidated. Indeed the effects of this disease were in almost every instance wonderful; for many of our people, though confined to their hammocks, appeared to have no inconsiderable share of health, for they eat and drank heartily, were chearful, and talked with much seeming vigour, and with a loud strong tone of voice; and yet, on their being the least moved, though it was only from one part of the ship to the other, and that too in their hammocks, they have immediately expired; and others, who have confided in their seeming strength, and have resolved to get out of their hammocks, have died before they could well reach the deck; nor was it an uncommon thing for those who were able to walk the deck, and to do some kind of duty, to drop down dead in an instant, on any endeavours to act with their utmost effort, many of our people
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having perished in this manner during the course of this voyage.

WITH this terrible disease we struggled the greatest part of the time of our beating round Cape Horn; and though it did not then rage with its utmost violence, yet we buried no less than forty-three men on board the *Centurion*, in the month of April, as hath been already observed; however, we still entertained hopes, that when we should have once secured our passage round the Cape, we should put a period to this, and all the other evils which had so constantly pursued us. But it was our misfortune to find, that the pacific ocean was to us less hospitable than the turbulent neighbourhood of Terra del Feugo and Cape Horn.

IBID. p. 144. This continued peril, which lasted for above a fortnight, was greatly aggravated by the difficulties we found in working the ship, as the Scurvy
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had by this time destroyed so great a part of our hands, and had in some degree affected almost the whole crew.

BOOK II. ch. I. p. 156. Our standing in for the main, on the 28th of May, cost us the lives of between seventy and eighty of our men.

IBID. ch. IV. p. 217. This transaction brought us down to the beginning of September, and our people by this time were so far recovered of the Scurvy, that there was little danger of burying any more at present; and therefore I shall now sum up the total of our loss since our departure from England, the better to convey some idea of our past sufferings, and of our present strength. We had buried on board the Centurion, since our leaving St. Helen's, two hundred and ninety-two, and had now remaining on board two hundred and fourteen. This will doubtless appear a most extraordinary mortality: but yet on board
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the Gloucester it had been much greater; for, out of a much smaller crew than ours, they had lost the same number, and had only eighty-two remaining alive. It might be expected, that on board the Tryal the the slaughter would have been the most terrible, as her decks were almost constantly knee deep in water; but it happened otherwise, for she escaped more favourably than the rest, since she only buried forty-two, and had now thirty-nine remaining alive. The havock of this disease had fallen still severer on the invalids and marines than on the sailors; for on board the Centurion, out of fifty invalids, and seventy-nine marines, there remained only four invalids, including officers, and eleven marines: and on board the Gloucester, every invalid perished; and out of forty-eight marines, only two escaped. From this account it appears, that the three ships together departed from England with nine hundred and sixty-one men on board, of whom six hundred and twenty-six were dead be-

fore this time; so that the whole of our remaining crews, which were now to be distributed amongst three ships, amounted to no more than three hundred and fifty-five men and boys; a number greatly insufficient for the manning the Centurion alone, and barely capable of navigating all the three, with the utmost exertion of their strength and vigour.

Book III. ch. I. p. 386. For though, after our departure from Juan Fernandes, we had enjoyed a most uninterrupted state of health, till our leaving the coast of Mexico, yet the Scurvy now began to make fresh havock amongst our people: and we too well knew the effects of this disease, by our former fatal experience, to suppose that any thing, except a speedy passage, could secure the greater part of our crew from being destroyed thereby. But as, after being seven weeks at sea, there did not appear any reasons that could persuade us we were nearer the trade wind than
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A P P E N D I X. 69

when we set out, there was no ground for us to imagine that our passage would not prove at least three times as long as we at first expected; and consequently we had the melancholy prospect either of dying by the Scurvy, or of perishing with the ship, for want of hands to navigate her. Indeed several amongst us were willing to believe, that in this warm climate, so different from what we felt in passing round Cape Horn, the violence of this disease, and its fatality, might be in some degree mitigated; as it had not been unusual to suppose, that its particular virulence, during that passage, was in a great measure owing to the severity of the weather. But the ravage of the distemper, in our present circumstances, soon convinced us of the falsity of this speculation, as it likewise exploded certain other opinions, which usually pass current about the cause and nature of this disease.

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FOR it has been generally presumed, that sufficient supplies of water and of fresh provisions are effectual preventives of this malady; but it happened that in the present case we had a considerable stock of fresh provisions on board, being the hogs and fowls which were taken at Païta; we besides almost daily caught great abundance of bonitos, dolphins, and albicores; and the unsettled season, which deprived us of the benefit of the trade-wind, proved extremely rainy, so that we were enabled to fill up our water-casks almost as fast as they were empty, and each man had five pints of water allowed him every day during the passage. But notwithstanding this plenty of water, notwithstanding that the fresh provisions were distributed amongst the sick, and the whole crew often fed upon fish, yet neither were the sick hereby relieved, or the progress or malignity of the disease at all abated. Nor was it in these instances only that we found the general maxims upon this head defective: for though it has
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been usually esteemed a necessary piece of management to keep all ships, where the crews are large, as clean and airy between decks as possible, and it hath been believed by many, that this particular alone, if well attended to, would prevent the appearance of the scurvy, or at least mitigate its virulence; yet we observed, during the latter part of our run, that though we kept all our ports open, and took uncommon pains in cleansing and sweetning the ships, the disease still raged with as much violence as ever; nor did its advancement seem to be thereby sensibly retarded.

HOWEVER, I would not be understood to assert, that fresh provisions, plenty of water, and a constant supply of sweet air between decks, are matters of no moment; I am on the contrary well satisfied, that they are all of them articles of great importance, and are doubtless extremely conducive to the health and vigour of a crew, and may, in many cases, prevent this fatal
malady

malady from taking place. All I have aimed at, in what I have advanced, is only to evince, that, in some instances, both the cure and prevention of this malady is impossible to be effected by any management, or by the application of any remedies which can be made use of at sea. Indeed I am myself fully persuaded, that when it has got to a certain head, there are no other means in nature for relieving the sick but carrying them on shore, or at least bringing them into the neighbourhood of the land. Perhaps a distinct and adequate knowledge of the source of this disease may never be discovered; but, in general, there is no difficulty in conceiving, that as a continual supply of fresh air is necessary to all animal life, and as this air is so particular a fluid, that, without losing its elasticity, or any of its obvious properties, it may be rendered unfit for this purpose, by the mixing with it some very subtle and otherwise imperceptible effluvia; it may be easy conceived, I say, that the
steams

steams arising from the ocean may have a tendency to render the air they are spread through less properly adapted to the support of the life of terrestrial animals, unless these steams are corrected by effluvia of another kind, which perhaps the land alone can afford.

To what hath been already said, in relation to the disease, I shall add, that our surgeon, (who, during our passage round Cape Horn, had ascribed the mortality to the severity of the climate) exerted himself in the present run to the utmost, but he at last declared, that all his measures were totally ineffectual, and did not in the least avail his patients. On this, it was resolved by the commodore, to try the success of two medicines, which, just before his departure from England, were the subject of much discourse, I mean the pill and drop of Mr. Ward. For however violent the operations of these medicines are said to have sometimes proved, yet, in the present

A a instance;

instance, where, without some remedy, destruction seemed inevitable, the experiment at least was thought adviseable: and therefore one or both of them, at different times, were administred to persons in every stage of the distemper. Out of the numbers who took them, one, soon after swallowing the pill, was seized with a violent bleeding at the nose: he was before given over by the surgeon, and lay almost at the point of death, but he immediately found himself much better, and continued to recover, though slowly, till we arrived on shore, which was near a fortnight after. A few others were relieved too for some days; but the disease returned again with as much virulence as ever. Though neither did these, nor the rest who received no benefit, appear to be reduced to a worse condition than they would have been if they had taken nothing. The most remarkable property of these medicines, and what was obvious in almost every one that took them, was, that they acted in proportion to the vigour
of

of the patient: so that those who were within two or three days of dying were scarcely affected; and as the patient was differently advanced in the disease, the operation was either a gentle perspiration, an easy vomit, or a moderate purge: but if they were taken by one in full strength, they then produced all the forementioned effects with considerable violence, which sometimes continued for six or eight hours together with little intermission.

CHAP. VIII. p. 494. The securing the prisoners was a matter of still more consequence, as not only the possession of the treasure, but the lives of the captors depended thereon. This was indeed an article which gave the commodore much trouble and disquietude, for they were above double the number of his own people; and some of them, when they were brought on board the Centurion, and had observed how slenderly she was manned, and the large proportion which the striplings bore

to the rest, could not help expressing themselves with great indignation to be thus beaten with a handful of boys. The method which was taken to hinder them from rising, was by placing all but the officers and the wounded in the hold, where, to give them as much air as possible, two hatchways were left open; but then, (to avoid any danger that might happen whilst the Centurion's people should be employed upon deck,) there was a square partition of thick planks made in the shape of a funnel, which inclosed each hatchway on the lower deck, and reached to that directly over it on the upper deck: these funnels served to communicate the air to the hold better than could have been done without them; and, at the same time, added greatly to the security of the ship; for they being seven or eight feet high, it would have been extremely difficult for the Spainards to have clambered up; and, still to augment that difficulty, four swivel guns loaded with musket-bullets were planted at the

the mouth of each funnel, and a centinel with a lighted match was posted there, ready to fire into the hold amongst them in case of any disturbance. Their officers, who amounted to seventeen or eighteen, were all lodged in the first lieutenant's cabin, under a guard of six men, and the general, as he was wounded, lay in the commodore's cabin, with a centinel always with him. Every prisoner too was sufficiently apprised, that any violence or disturbance would be punished with instant death. And that the Centurion's people might be at all times prepared, if, notwithstanding these regulations, any tumult should arise, the small arms were constantly kept loaded in a proper place, whilst all the men were armed with cutlasses and pistols; and no officer ever pulled off his clothes when he slept, or, when he lay down, omitted to have his arms always ready by him.

THESE

THESE measures were obviously necessary, considering the hazards to which the Commodore and his people would have been exposed, had they been less careful. Indeed the sufferings of the poor prisoners, though impossible to be alleviated, were much to be commiserated; for the weather was extremely hot, and the stench of the hold loathsome, beyond all conception, and their allowance of water but just sufficient to keep them alive; it not being practicable to spare them more than at the rate of a pint a day for each, the crew themselves having only an allowance of a pint and a half. All this considered, it was wonderful that not a man of them died during their long confinement, except three of the wounded, who expired the same night they were taken, though it must be confessed, that the greatest part of them were strangely metamorphosed by the heat of the hold; for when they were first brought on board, they were slightly robust fellows; but when, after above a months imprisonment,

A P P E N D I X. 79

ment, they were discharged in the river of Canton, they were reduced to mere skeletons; and their air and looks corresponded much more to the conception formed of ghosts and spectres, than to the figure and appearance of real men.

NUM-

NUMBER XI.

From Rushworth's Collections, p. 154.

THIS army consisted of twelve regiments, was intended to land in France; but, being ready for transport, the French, notwithstanding their promise and the treaty of marriage, demurred (yet not plainly denied) their passage. Nevertheless the whole army was shipped, and put over to Calais, and after a tedious stay, in hope yet to land, and pass through the country, they were forced to set sail for Zealand. Neither were they suffered to land there, coming so unexpectedly upon the States, and in a hard season for provision of victuals.

THUS they were long pent up in the ships, and suffered the want of all necessities; by which means a Pestilence came
among

A P P E N D I X. 81

among them, and raged extremely ; so that they were thrown into the sea by multitudes, in so much that scarce a third part of the men were landed ; the which also afterward mouldered away, and the design came to nothing.

NUMBER XII.

From Dr. Pringle's Observations,
pages 11, 12.

IN the beginning of June (N. S.) 1742, the British troops began to embark for Flanders. There were in all, of foot and cavalry, about 16000; the winds were favourable, the several embarkations short, the men landed in good health, and went into their several garrisons.

THE head quarters were at Ghent, with most of the cavalry, three battalions of guards, one marching regiment, and the train; eight battalions were quartered at Bruges, two at Courtray, a regiment of dragoons lay at Oudenarde, and another was divided between Aloft and Grammont. There was one general hospital at Ghent; but in the other garrisons, the care of the
sick

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sick was committed to the surgeons of their respective regiments.

DURING the summer and autumn, the weather was good, the heats moderate, and the country, for the season and climate, enjoyed good health. The British officers shared in it, but the common men were generally unhealthy.

N U M B E R X I I I .

From Dr. Pringle's Observ. p. 18, 19.

HENCE the diseases from the first encampment, till past the summer solstice, are all highly inflammatory. Fluxes, remitting and intermitting Fevers are, during this period, never general; and such as occur are never without great inflammation.

THE cavalry had not near their proportion of sick, and never have in camps; for the care of the horses gives the men an easy, but constant employment; their clocks keep them dry in rains, and serve for bed-clothes at night. For the officers, they enjoyed perfect health, as they always do in the first part of a campaign,

N U M -

NUMBER XIV.

From Dr. Pringle's *Observ.* p. 18, 19.

HISTORY abounds with examples of pestilential Fevers, added to the other miseries of a siege. Nay, there is scarce any instance of a town being long invested, without some fatal malady of this kind. Sometimes it may be owing to the filth of a place crowded with people, and cattle brought in for shelter, as it formerly happened both at Athens and at Rome. At other times the sickness has been occasioned by corrupted grain, and meats long salted, becoming putrid.

THOUGH the putrification of a vegetable substance is not to be reckoned nearly so fatal as that of animals. It is not however without danger; for vegetables rotting in a close place yield a cadaverous smell; and we have instances of malignant fevers occasioned by the effluvia of putrid cabbages, as well as of plants in marshes.

N U M-

NUMBER XV.

From Rushworth's Collections, p. 196.

IN the beginning of October the fleet consisted of eighty ships, great and small. The Ann Royal, a ship of twelve hundred tons, being admiral, put forth from Plymouth for the coast of Spain, with these regiments aboard the fleet, according as we find it mentioned in an old list, *viz.* The Duke of Buckingham's, the Lord Wimbeldon's, Sir William St. Leger's, (Serjeant Major General) and Colonel Burrough's regiments, were shipped in the Admiral's squadron, which carried 2093 seamen, and 4032 land soldiers. The Lord Valentia's regiment, the Earl of Essex's, and Colonel Harwood's were shipped in the Vice Admiral's squadron, carrying 1765 seamen, and 3000 land soldiers. The Earl of Essex was Vice Admiral, and commanded this squadron.

Sir

Sir Charles Rich his regiment, Sir Edward Conway's, and Colonel regiments were shipped in the Rear Admiral's squadron, carrying 1833 mariners, 2998 soldiers.

THE fleet, after four day's sail, was encountered with a furious storm, which so dissipated the ships, that of fourscore no less than fifty were missing for seven days. Afterwards they all came together upon the coast of Spain, where they found a conquest ready, the Spanish shipping in the bay of Cadiz; the taking whereof was granted feasible and easy, and would have satisfied the voyage, both in point of honour and profit. This was either neglected, or attempted preposterously. Then the army landed, and Sir John Burroughs took a fort from the Spaniard; but the soldiers finding good store of Spanish wines, abused themselves, and hazarded the ruin of all, (had the enemy known in what condition they were) notwithstanding all commands to the contrary. So they were presently shipped again; and

and the General, putting to sea, intended to wait twenty days for the Plate-fleet, which was daily expected from the West Indies. But the evil condition of his men, by reason of a general contagion, enforced him to abandon the hopes of this great prize: so the English, having effected nothing, returned home with dishonour in November following.

NUMBER XVI.

From Douglas's Summary, vol. 1. p. 555.

ANNO 1693, June 12. arrived at Boston Sir Francis Wheeler's squadron, fitted out to distress the French colonies in America: he made some vain attempts upon Martinico and Guardaloupe. Pursuant to instructions Sir Francis proposes to the governor and council, the attempting of Quebec in Canada, to sail by the beginning of July, with a recruit of 4000 men, and four months provisions: this could not be complied with upon so short notice. The squadron imported a malignant, ill-conditioned Fever, which destroyed many of our people, and sailed from Boston, August 3. attempted Placentia of Newfoundland in vain; arrived in England October 13. with hands scarce sufficient to bring the ships home. How inhumanly do sovereignties play away their men!

NUMBER XVII.

From Account of the European settlements in America, p. 27,---30.

IN this condition was the island Hispaniola on the arrival of Columbus, whose first business was to collect the scattered fragments of the colony, and to form them into a body; this he was the better able to accomplish, because the present danger added a weight to his authority; but it was necessary that he should lose no time. He was resolved to act with what force he had, rather than to wait until the union of the islanders might be better cemented against him, and they might find some lesser matters in their favour to raise their courage, and abate their terror of the Spanish arms. He therefore marched against the king, who had killed the sixteen Spainards, as having a greater appearance of justice, and because he happened

pened to be worse prepared to receive him than the others. He was easily subdued, and several of his subjects sent prisoners into Spain. The second whom he designed to attack being better prepared against force, he was resolved to circumvent him by fraud, and got him into his power by a stratagem, which did no honour to his sincerity, and rather shewed great weakness in this unfortunate barbarian, than any extraordinary contrivance in those who deceived him.

THE other princes were not terrified at these examples. Their hatred to the Spaniards increased; and perceiving that all depended upon a sudden and vigorous exertion of their strength, they brought an immense army, it is said of 100,000 men, into the field, which was arrayed in the largest plain in that country. Columbus, though he had but a small force, did not scruple to go out to meet them. His army consisted but of 200 foot, twenty horse,

and twenty wolf dogs. The latter part of this army has a ludicrous appearance; but it was a very serious matter amongst a people no better provided with arms offensive or defensive than the Indians. Neither was it rash in Columbus to venture an engagement with forces so vastly superior in numbers; for when such numbers are no better skilled or armed than these were, their multitude is in fact no just cause of dread but to themselves. The event was answerable; the victory was decisive for the Spainards, in which their horses and dogs had a considerable share; the loss on the side of the Indians was very great; and from that day forward they despaired, and relinquished all thoughts of dislodging the Spainards by force. Columbus had but little difficulty in reducing the whole island, which now became a province of Spain, had a tribute imposed, and forts built on several parts to enforce the levying of it, and to take away from this unhappy people all prospect of liberty.

IN this affecting situation they often asked the Spainards, when they intended to return to their own country. Small as the number of these strangers was, the inhabitants were extremely burdened to subsist them. One Spainard consumed more than ten Indians; a circumstance which shews how little this people had advanced in the art of cultivating the earth, or how lazy they were in doing it, since their indigence reduced them to such an extreme frugality, that they found the Spainards, who are the most abstemious people upon earth, excessively voracious in the comparison. Their observation of this, joined to their despair, put the Indians upon a project of starving out their invaders. In pursuance of this scheme, they entirely abandoned the little agriculture which they practised, and unanimously retired into the most barren and impracticable parts of the island. This ill-advised stratagem completed their ruin. A number of people crowded into the worst parts of the country,

try, subsisting only upon its spontaneous productions, were soon reduced to the most terrible famine. Its sure attendant epidemical sickness pursued at its heels; and this miserable people, half famished, and lessened a third of their numbers, were obliged to relinquish their scheme, to come down into the open country, and to submit once more to bread and fetters,

NUMBER XVIII.

From Douglas's Summary, vol. 1.

P. 322.

IN the spring 1746, the French fitted out a strong armament at Brest, to be commanded by Duke d'Anville, lieutenant-general des armées navales, to recover Louisburg, and distress the British North-America. They did not sail from Rochelle until June 22. they escaped or were overlooked by the British admiral Martine's squadron of observation. The court of Great Britain had certain information of their being sailed, and of their destination; but, perhaps for certain reasons of state, did not send after them, though we had at that time an equal or better armament ready to sail. This French fleet, after a tedious passage, and having suffered in a storm near the island of Sable, did not
arrive

arrive off of Chebucto in Nova Scotia until September 10. The armament consisted of eleven line of battle ships, some frigates, two fire-ships, transports, &c. having 3150 land-forces aboard. Duke d'Anville's instructions were, to proceed against Louisburg, and when taken, to dismantle it; thence to proceed against Annapolis in Nova Scotia, and when taken, to garison it; thence he was to sail for Boston, and burn it; afterwards, in ranging along, he was to annoy and distress the coast of North-America; and finally, to visit our West-India sugar islands.

D'ANVILLE detached three capital ships and a frigate under the command of M. Conflans, to convoy the trade to Cape Francois in Hispaniola, and to return and join the grand squadron. These were the four French men of war which near Jamaica fell in with a British squadron commanded by Commodore Mitchell; but Mitchell, in effect, refused taking of them.

M. Conflans

M. Conflans orders were, that, for advice, he was to cruise upon the Cape Sable shore between Cape Negroe and Cape Sambro for a limited time, and then to sail directly for France. They received no advice, and never joined D'Anville's squadron. These were the ships that spoke with some of our fishing schooners, and gave a faint chase to the Hinchinbrook man of war snow September 15. They avoided giving any alarm to our Louisburg squadron.

THIS French armament, from their being long aboard before they sailed, and from a tedious passage, were become very sickly; (Duke d'Anville died, and was buried at Chebucto;) they put in to Chebucto harbour, landed and encamped to recruit their health. In this place near one half of their people died of scorbutic putrid Fevers and Dysenteries. The Nova Scotia Indians frequented them much; and this camp illness becoming contagious, the

Nova Scotia Indians were reduced by above one third. They were supplied with fresh provisions from our French districts of Minas, Cobequid, Pisiquid, and Chiconicto; the French commissaries or purfers of the squadron paid, according to instructions, not only for this fresh stock, but for all the provisions furnished to the Canadians and their Indians from the commencement of this war. Our squadron at Cape Breton, under Admiral Townshend, did not visit the French fleet when distressed.

THE season of the year being too far advanced, their strength much impaired, the detached four men of war not having joined them, and from disappointments, and the officers in a fret with one another, it was resolved in a council of war to proceed against Annapolis Royal of Nova Scotia. They sailed from Chebucto October 13. After four days they met with a storm off Cape Sables; and, in a council of war, it was resolved to return directly
for

for France. Two of the Squadron were in the bay of Fundi, ships of sixty and thirty-six guns; that of thirty-six guns came into the basin. Our ships the Chester, Shirley, and Ordnance frigate, well manned with land-forces, went in chase of them. The Chester ran aground. The French ships, after having put ashore an express with advice to De Ramsay, that the French fleet were returned to France, escaped, and continued their voyage home.

THIS French armament upon the coast, for very good reasons, alarmed Boston. In a few days, with great expedition, it was reinforced by 6400 country inland militia. The militia of the sea-coast countries remained at home for their own defence, to prevent depredations. Upon occasion Connecticut was to have sent us 6000 men, being about one half of their militia.

100 A P P E N D I X.

THE French in Chebuſto were eight ſhips of the line, whereof the Perfait was burnt, as incapable to proceed. Upon the coaſt of France the Nottingham took the Mars; the Exeter drove the Ardent aſhore, and burnt her. This was the fate of the great French armada, or armament, againſt the Britiſh North American colonies.

NUM-

NUMBER XIX.

From Smith's Thucydides, vol. 1.
book 2. p. 160.

IN the very beginning of summer, the Peloponnesians and allies, with two thirds of their forces, made an incursion, as before, into Attica, under the command of Archidamus, son of Zeuxidamus, king of the Lacedemonians, and, having formed their camp, ravaged the country.

THEY had not been many days in Attica, before a sickness began first to appear amongst the Athenians, such as was reported to have raged before this in other parts, as about Lemnos, and other places. Yet a Plague so great as this, and so dreadful a mortality, in human memory, could not be paralleled. The physicians, at first, could administer no relief through utter ignorance ;

rance; nay, they died the fastest the closer their attendance on the sick; and all human art was totally unavailing. Whatever supplications were offered in the temples, whatever recourse to oracles and religious rites, all were insignificant; at last expedients of this nature they totally relinquished, overpowered by calamity. It broke out first, as it is said, in that part of Ethiopia which borders upon Egypt; it afterwards spread into Egypt and Libia, and into a great part of the King's dominions; and from thence it, on a sudden, fell on the city of the Athenians. The contagion shewed itself first in the Piræus, which occasioned a report that the Peloponnesians had caused poison to be thrown into the wells; for as yet there were no fountains there. After this it spread into the upper city, and then the mortality very much increased. Let every one, physician or not, freely declare his own sentiments about it: let him assign any credible account of its rise, or the causes strong enough, in his opinion, to introduce
so

so terrible a scene. I shall only relate what it actually was; and, as from an information in all its symptoms, none may be quite at a loss about it, if ever it should happen again, I shall give an exact detail of them, having been sick of it myself, and seen many others afflicted with it.

THIS very year, as is universally allowed, had been more than any other remarkably free from common disorders; or whatever diseases had already seized the body, they ended at length in this. But those who enjoyed the most perfect health, were suddenly, without any apparent cause, seized at first with head-achs extremely violent, with inflammations, and fiery redness in the eyes. Within, the throat and tongue began instantly to be red as blood; the breath was drawn with difficulty, and had a noisome smell. The symptoms that succeeded these were sneezing and hoarseness; and not long after, the malady descended to the breast, with a violent cough: but
when

when once settled in the stomach, it excited vomitings, in which was thrown up all that matter physicians call *Discharges of Bile*, attended with excessive torture. A great part of the infected were subject to such violent hiccups, without any discharge, as brought upon them a strong convulsion, to some but of a short, to others of a very long continuance. The body, to the outward touch, was neither exceeding hot, nor of a pallid hue, but reddish livid, marked all over with little pustules and sores; yet, inwardly, it was scorched with such excessive heat, that it could not bear the lightest covering, or the finest linen upon it, but must be left quite naked. They longed for nothing so much as to be plunging into cold water; and many of those who were not properly attended, threw themselves into wells, hurried by a thirst not to be extinguished, and whether they drank much or little, their torment still continued the same. The restlessness of their bodies, and an utter inability of composing

posing themselves by sleep, never abated for a moment ; and the body, so long as the distemper continued in its height, had no visible waste, but withstood its rage to a miracle ; so that most of them perished within nine or seven days, by the heat that scorched their vitals, though their strength was not exhausted ; or, if they continued longer, the distemper fell into the belly, causing violent ulcerations in the bowels, accompanied with an excessive flux, by which many, reduced to an excessive weakness, were carried off : for the malady beginning in the head, and settling first there, sunk afterwards gradually down the whole body. And whoever got safe through all its most dangerous stages, yet the extremities of their bodies still retained the marks of its violence ; for it shot down into their privy members, into their fingers and toes, by losing which, they escaped with life. Some there were who lost their eyes, and some, who being quite recovered, had at once totally lost all memory,

and quite forgot, not only their most intimate friends, but even their own selves: for as this distemper was in general virulent beyond expression, and its every part more grievous than yet had fallen to the lot of human nature, so, in one particular instance, it appeared to be none of the natural infirmities of man, since the birds and beasts that prey upon human flesh, either never approached the dead bodies, of which many lay about uninterred, or certainly perished if they ever tasted. One proof of this is the total disappearance then of such birds, for not one was to be seen, either in any other place, or about any one of the carcasses. But the dogs, because of their constant familiarity with man, afforded a more notorious proof of this event.

THE nature of this pestilential disorder was in general ; for I have purposely omitted its many varied appearances, or the circumstances particular to some of the
infected,

infected, in contradistinction to others, such as has been described. None of the common maladies incident to human nature prevailed at that time; or whatever disorder any where appeared, in ended in this. Some died merely for want of care, and some, with all the care that could possibly be taken; nor was any one medicine discovered, from whence could be promised any certain relief, since that which gave ease to one, was prejudicial to another. Whatever difference there was in bodies, in point of strength, or in point of weakness, it availed nothing; all were equally swept away before it, in spite of regular diet and studied prescriptions. Yet the most affecting circumstances of this calamity were that dejection of mind, which constantly attended the first attack; for the mind sinking at once into despair, they the sooner gave themselves up without a struggle, and that mutual tenderness, in taking care of one another, which communicated the infection, made them drop like sheep.

This latter case caused the mortality to be so great: for if fear withheld them from going near one another, they died for want of help; so that many houses became quite desolate for want of needful attendance; and if they ventured, they were gone. This was most frequently the case of the kind and compassionate. Such persons were ashamed, out of a selfish concern for themselves, entirely to abandon their friends, when their menial servants, no longer able to endure the groans and lamentations of the dying, had been compelled to fly from such a weight of calamity. But those especially who had safely gone through it, took pity on the dying and the sick, because they knew by experience what it really was, and were now secure in themselves; for it never seized any one a second time, so as to be mortal. Such were looked upon as quite happy by others, and were themselves at first overjoyed in their late escape, and the groundless hope that hereafter no distemper would prove fatal to them. Beside this
reigning

reigning calamity, the general removal from the country into the city was a heavy grievance, more particularly to those who had been necessitated to come thither; for as they had no houses, but dwelling all the summer season in booths where there was scarce room to breathe, the Pestilence destroyed with the utmost disorder; so that they lay together in heaps, the dying upon the dead, and the dead upon the dying. Some were tumbling one over another in the public streets, or lay expiring round about every fountain, where they had crept to assuage their immoderate thirst. The temples, in which they had erected tents for their reception, were full of the bodies of those who had expired there; for in a calamity so outrageously violent, and universal despair, things sacred and holy had quite lost their distinction. Nay, all regulations observed before in matters of sepulture, were quite confounded, since every one buried where-ever he could find a place. Some, whose sepulchres were already filled, by the numbers which had

had perished in their own families, were shamefully compelled to seize those of others. They surpris'd, on a sudden, the piles which others had built for their own friends, and burning their dead upon them; and some, whilst one body was burning on a pile, tossed another body they had dragg'd thither upon it, and went their way.

THUS did the pestilence give their first rise to those iniquitous acts which prevail'd more and more in Athens: for every one was now more easily induced openly to do what, for decency, they did only covertly before. They saw the strange mutability of outward condition; the rich untimely cut off, and their wealth pouring suddenly on the indigent and necessitous; so that they thought it prudent to catch hold of speedy enjoyments, and quick gusts of pleasure, perswaded that their bodies and their wealth might be their own merely for the day. Not any one continued resolute enough to form any honest or generous

A P P E N D I X. I I I

rous design, when so uncertain whether he should live to effect it. Whatever he knew could improve the pleasure or satisfaction of the present moment, that he determined to be honour and interest. Reverence of the gods, or the laws of society, laid no restraints upon them; either judging that piety and impiety were things quite indifferent, since they saw that all men perished alike, or throwing away every apprehension of being called to an account for their enormities, since justice might be prevented by death, or rather, as the heaviest of judgments to which man could be doomed, was already hanging over their heads, snatching this interval of life for pleasure before it fell.

WITH such a weight of calamity were the Athenians at this time on all sides oppressed. Their city was one scene of death, and the adjacent country of ruin and devastation. In this their affliction they called to mind, as was likely they should, the following

lowing prediction, which persons of the greatest age informed them had been formerly made ;

Two heavy judgments will at once befall,

A Doric war without, a Plague within your wall.

THERE had been indeed a dispute before, whether their ancestors, in this prediction, read λοιμῶν, a plague, or λιμῶν, a famine ; yet, in their present circumstances, all with probability agreed, that λοιμῶν, a plague, was the right : for they adopted the interpretation to what they now suffered.

NUMBER XX.

From the London Gazette, Naples,
April 27. 1743.

THIS court has intirely approved the conduct of the magistrates of health at Messina, on the discovery lately made there of the Plague on board of a Neapolitan vessel from the Morea, as some of the crew died whilst performing quarantine at that port; in consequence of which the rest of the crew were immediately ordered to the Lazaretto, and the vessel and goods set on fire.

N U M B E R X X I .

Naples, June 4.

THEY continue, with success, to raise the body of 12000 militia lately ordered; they will be compleated, 'tis thought, by the middle of this month. The magistrate of health has suspended all manner of commerce with the city of Messina, on a discovery lately made, that about fifty persons a day have lately died there of an epidemical Fever. On the 2d instant, the Queen appeared abroad for the first time since her delivery.

Num-

NUMBER XXII.

From the London Gazette, Palermo,
June 21. 1743. N.S.

A True discovery has been made from whence the Plague was brought to Messina. A Genoese Tartan arrived there in March last, under Neapolitan colours, from the Levant, laden with wooll, that had been bought at Missilongi, where the master was furnished with a clean patent, but afterwards went to Patrofa, where the infection was, to purchase contraband goods. The crew opposed this, but on his menaces they were obliged to land, and bought up tobacco and some cases of cotton-stuffs, and without having his bill of health renewed, but, with the clean one from Missilongi, proceeded to Messina. Before their arrival, a sailor who had touched the said cases died of the Plague, and was

F f 2

thrown

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thrown overboard, on which account the other failors avoided going near the cabin where those cases were. On their arrival at Messina, they took an oath that they were not infected, and that the failor wanting was dead of a Fever, and had been thrown overboard when they were distant from the land. Whilst they were under quarantine, the master, having agreed it with the guard, landed in the night-time the tobacco and cotton-stuffs: the failors, out of fear, did not discover it; but as the master died three days afterwards, and other failors fell sick, and died of the Plague, the rest of them discovered what had happened; upon which the vessel was burnt, and the failors were stripped naked and put into the Lazaretto, none of whom to this time have died. The magistrates of health at Messina omitted to make search for the contraband goods which were concealed; and as the said failors were all in health towards the 15th of May, the people who had received the goods began to sell them; immediately
on

on which a malignant Fever broke out in that quarter of the town only. The Senate took no precaution to prevent the sickness spreading; but as, by the 22d of May, it increased, and the number of people who died was considerable, a consultation of the physicians was held, who concluded, that it was an epidemical Fever; which account was written to Palermo. Two physicians only said it was the Plague, and those two were reprimanded and chastised, for fear of prejudice to the commerce of the city. Towards the 25th of May there died upwards of 100 persons a day. To the 31st of the said month, the dead amounted to above 600, besides those that were sick; yet the physicians persisted in saying it was a malignant Fever only, and not the Plague, because it was not catching. Finally, it has been observed, that till the 8th of this month the dead amounted to 3000 in the city, and 3000 in the hospital. The city of Carania sends every day to Messina corn, bread, flour, and

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and other eatables. There are letters now at Palermo, that, to the 12th of this month, call the number of the deceased 9000: and the Senate there write, that they cannot hold out any longer for want of a sufficient number of people; therefore one of the three vicars-general, who were sent to make a barricade from Melazzo to Taormina, has caused several ovens to be built at the latter place, and continually sends bread and eatables to Messina. A sum of 40000 crowns has been sent to him, to dispose of as he shall find it convenient. They write also from Messina, that all the children whose parents are dead have been put into magazines, where they are nourished by goats milk. People here are under great apprehensions, on being informed, that there are not people in Messina sufficient to bury the dead; that the air may be infected; therefore the magistrates of health of Palermo have ordered all capital criminals in the prisons, as well as those condemned to

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to the gallies to be set at liberty, and to send them to Messina to assist the sick people. Two gallies are expected from Naples to guard these coasts; and the King has sent a large sum of money to succour the poor of that city. The infection has not yet extended itself beyond that city.

NUM-

N U M B E R X X I I I .

From Maitland's history of London,
vol. i. p. 430.

ABOUT the beginning of May, one of the most terrible Plagues that ever infested this, or perhaps any other kingdom, broke out in this city; by whose direful ravages 68,596 persons were swept away; which, together with the number of those that died of other distempers, made the bill of mortality of this year amount to 97,306. This contagion happening just forty years after the horrid Pestilence anno 1625, occasioned some to impute a fatality to that number; as if, in this sense, the land was to have rest only forty years.

THE week wherein this hideous distemper was at first discovered, it carried off nine persons, whereby the citizens were so greatly

ly alarmed, that an universal dread diffused itself amongst people of all ranks. But the week after, that number, according to the bill of mortality, being reduced to three, the citizens fears were greatly alleviated; but the next week, the number increasing to fourteen, and progressively to forty-three, the people were struck with a mighty consternation, which begot thoughts in many of leaving the city. But in the month of June, the number having gradually increased to four hundred and seventy *per* week, it put the nobility, gentry, and principal citizens upon the wing of safety: all being instantly in an amazing hurry, and the city emptying itself into the country, the streets and roads were excessively crowded with travellers and passengers. But in the month of July, the bill increasing to two thousand and ten, all houses were shut up, the streets deserted, and scarce any thing to be seen therein, but grass growing, innumerable fires for purifying the infected air, coffins, pest-carts, red crosses upon doors, with the

G g inscription

inscription of *Lord have mercy upon us!* and poor women in tears with dismal aspects, and woful lamentations, carrying their infants to the grave: and scarce any other sounds to be heard than those incessantly emitted from the windows, of *pray for us*, and the dreadful call of *bring out your dead*: with the piteous groans of departing souls, and melancholly knells for bodies ready for the grave.

UNDER these dreadful and deplorable circumstances, the citizens, when in the greatest want of spiritual guides, were forsaken by their parochial ministers; and the people, crowding into eternity, bewailing the want of spiritual assistance, the non-conformist ministers, considering their great obligations to God, and indispenfible duty, in this dreadful visitation, to their fellow-creatures, were induced, though contrary to law, to repair to the deserted church pulpits, whither the people, without distinction of church and dissenter, joyfully resorted.

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The concourse on those occasions, was so exceeding great, that the ministers were frequently obliged to clamber over the pews to get at the pulpits; and if ever preaching had a better effect than ordinary, it was at this time: for the people as eagerly caught at every word, as a drowning man at a twig, and with the same greediness as if their eternal happiness had thereon depended,

IN the month of September death rode triumphant; for having borrowed (if I may be allowed the expression,) Time's fatal scythe, he mowed down the people like grass; for the burials then amounted to 6988; but the week after, the bill falling to 6544, gave glimmering hopes that the distemper was past its crisis. But the great increase the week following to 7165, reimmersed the people into an abyss of horror and despair; for now they were struck with the dreadful apprehensions, that in a few days the living would not suffice

to bury the dead: however, they were happily mistaken, for after this the contagion gradually decreased, till it pleased the Almighty to restore this desolate and miserable city to its pristine state of health.

NUMBER XXIV.

The following Letter from Dr. John Cook, Physician at Hamilton, from Dr. Lind, page 335.

I HERE send you some brief remarks I made in general upon the Scurvy in Russia, Tartary, &c. in all which countries it is an endemic and dreadful disease.

TAVERHOFF lies in 52 deg. N. Lat. where the stream of the Verona is received into the Don. It is situated, as most towns on the banks of that river, on a low sandy soil, and surrounded with lakes, marshes and woods. The winter commonly begins in the month of October. In November all the rivers, lakes, and marshes, are quite frozen over, and the whole country is covered with snow, which continues till about the beginning of April O. S. At this time
the

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the snow suddenly melts away, leaving the earth covered with grass, and many wholesome vegetables. The spring is so very short, that the inhabitants are scarcely sensible of it; for in less than fifteen days, the weather becomes excessively hot, and the cold frosty winter is suddenly expelled by a very warm summer, that continues until the month of September: during which time, the weather is very hot and moist. When I was there, in the years 1738 and 1739, 27000 boors were employed in cutting wood, and preparing it for building of ships for the use of the army; as also about five or 600 sailors, who were their overseers, and between two or 3000 soldiers, who guarded the boors, to prevent their making an escape. In the month of February 1738, the Scurvy made its appearance. The boors were not so much afflicted with it as the sailors, nor the sailors so much as the soldiers. Many, both sailors and soldiers, were sent to our hospital this month, but their numbers
were

were greatly increased in March. Towards the latter end of April, they were mostly recovered, and many were discharged from the hospital. In June none remained, except the most inveterate cases. In July an intermitting and obstinate remitting Fever prevailed, From the 1st to the 20th of August, we had but few patients. From that time, to the 1st of October, Agues raged with more violence than ever; and Fluxes succeeded in October. This month the first snow fell; and at that time children were universally affected with sore throats. We had afterwards settled frosty weather, and but little sickness, except a few inflammatory Fevers, until about the beginning of the year 1739, when the Scurvy began to shew itself, much about the same time as in the preceeding year, and continued its usual length of time.

ASTRACAN is situated in $46\frac{1}{2}$ deg. N.L.
on a small island, washed by the Volga.
Here

Here are many salt lakes both upon the islands and desert. The garison soldiers are much more subject to the scurvy than the boors, and these last than the sailors. The soldiers live a very indolent life, having but little duty to perform. They eat hardly any thing else, even in their hospitals, besides rye-bread and meal, with fish, and have nothing but water for drink, except the decoctions prescribed for them by the surgeons. Their hospitals are very damp and rotten. This poor garison of five regiments, consisting of about 6000 men when compleat, is yearly recruited with between 600 and 1000 men. The boors live also but a lazy indolent life, being employed either in fishing, or in navigating great boats from Astracan, sometimes as far as Tweer. On the contrary, the sailors work hard at all times of the year, both in the docks and at sea, and live much better, having good provisions of all sorts. The winter begins commonly in October, and continues till March. It is extremely
severe

fevere during the months of January and February. The Scurvy generally breaks out in the latter end of February. I found it here often complicated with other diseases, viz. the Lues Venerea, Agues, Dropsies, Phthisis, &c. The violence of the distemper, (except in complicated cases,) seldom continues after June, or to the middle of July.

RIGA, the metropolis of Livonia, is the last place I shall mention. The winters are here very long. The soil, for many miles about it, is sandy, and covered with many lakes, mosses, and morasses. The boors, living better than they do in Russia and Tartary, are not so subject here to the Scurvy as the soldiers in the army, nor these so much as the proper garison; for, by their labour they gain money, and can purchase flesh in the winter. The garison soldiers consisting of between 6 and 7000 men, are most miserably lodged. The walls of their ill contrived barracks are

H h

continually

continually moist and warm. At Riga, in the years 1749 and 1750, but especially in the year 1751, the Scurvy raged with the utmost violence. It broke out in the month of February that year. Here I saw the most dreadful spectacles that ever I beheld. Their rotten gums gangrened, as also their lips, which dropped off; the sphacelus spread to their cheeks, and muscles of their lower jaw; and the jaw-bone in some fell down upon the sternum. When the mortification first began, we tried the bark to no purpose; nothing but death rid the unhappy wretches of their frightful misery.

DR. NITZCH's method of cure corresponds with, and is agreeable to the method practised in Russia, especially by the German physicians and surgeons. What he terms the hot or painful Scurvy, is generally a complication of this disease with the Pox. Although some may die in the state he describes, without having
any

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any outward swelling upon the body, yet such persons have always schirrous swellings of the glands in the abdomen, particularly of the mesenteric glands, and of the liver, which are perceptible to the touch, even before death. My method of cure was in general as follows, unless some particular symptoms or cases required me to deviate from it, I commonly begin with a very gentle purge or two, and then gave the decoct. Antiscorb. and essent. Antiscorb. At Astracan we gave the juice of Rad. Raphan mixed with a very little brandy, twice a day. The patients had fresh flesh-meat every day, and what greens or salads we could procure them. They used the warm bath once or twice a-week. Before they eat, drank, or swallowed any medicines, their mouths were well gargarized with solutions of nitre. Their gums were dressed with Ung. Egyptiac: Tinct. Myrrh: Tinct. Lace: &c. I obliged them to use exercise, and to walk about both forenoon and afternoon, when the weather would

permit. I allowed them to sleep moderately, and forbid them all dried, salt, and fat meats. Fumigating the wards is common in all the hospitals in Russia.

WHEN I came home to this country, I found the denomination of nervous disorders universally applied to most chronic and cachectic ailments. Upon examining those complaints in the lower sort of people, who live intirely on the farines and a gross diet, I observed they had an universal lassitude, pains, which they termed Rheumatic, flying thorough their body, and a breathlessness upon using exercise. The legs were sometimes swelled, and the abdomen almost always tense and tumified: but whether they had swellings or not, they had generally an ill-coloured scorbutic complexion, and were listless and inactive to a great degree, with complaints of pains in their jaws, teeth, &c. I made no scruple to pronounce such cases scorbutic; and by proper antiscorbutic regimen

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gimen medicines, diet, and exercise, seldom failed to give very sensible relief. I have disobliged many patients by saying they had the scurvy, a disease as hateful as it is unknown in this part of the world: but the relief they obtained from antiscorbutics, soon convinced both them and myself that their cases were not mistaken.

N U M-

NUMBER XXV.

From Douglas's Summary, vol. 1.
page 178, *et seq.*

THE Indian nations, or general Divisions, which lie upon, or near the Eastern shore of North America, are the Indians of West Greenland, commonly called Davis's Straits, Eskimaux, Algonquins, Tahsagrondie, Owtawaes, Miamies, Chikefaus, Mikamakis, Abnaquies, Irocois or Mohawks, Chawans, Old Tuscararoes, Curtumbaes, Chirakees, and Greek Indians.

THE Indians of West Greenland are a few straggling miserable people, live in caves or dens under ground, because of the severity of the cold, and much subject to the Scurvy.

THE

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THE Eskimaux extend from Davis's and Hudson's Straits north, along the west-side of the Atlantic ocean, to the mouth of St. Lawrence river south, in 66 d. or 67 d. N. Lat. their numbers are not mentioned.

ALGONQUINS, in several tribes, reach from the mouth of St. Lawrence river along its north side, extending about 150 leagues, may be about 1500 fighting men.

TAHSAGRONDIE Indians, between the Lakes Erie and Hurons, are of small numbers, and of no great notice.

OUTAWAES, a great and powerful nation, their numbers not computed. There is a large nation southwest of the Outawaes, called by the French Les Renards; they are not within our knowledge.

MIAMIES, so called by the French, (we call them Twightwies or Ilinors,) their numbers not computed.

CHIKESAUS

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CHIKESAUS seem to be next to the Miamies, on the eastern side of the Mississipi, they are not computed.

THE Mikamakis of l'Accadie, or Nova Scotia, some of them live along Cape Sable shore, some at Green-bay, Menis, and Chicanicto, some in Cape Breton island and St. John's island. They do not much exceed 350 fighting men.

THE Abnaquies, properly the New England Indian nation, reach east and west, from the bay of Fundy to Hudson's or New-York river and Lake Champlain or Corlaer, north and south from the St. Lawrence or Canada great river, to the Atlantic ocean. They are in many tribes, but dwindle much, and become less formidable; they consisted of many tribes, some extinct, some extinguishing, and the others much reduced; let us enumerate them in their natural order. 1. The Indians of St. John's river do not exceed 150 fighting men.

men. 2. Penobscoi Indians, their numbers not exceeding 150 men fit to march. 3. Sheepscut Indians, not exceeding two or three families. 4. Quenebec Indians do not exceed sixty fighting men. 5. Amerecogin Indians, upon Pegepscut or Brunswic river, they may be said extinct. 6. Pigwacket Indians, not exceeding a dozen fighting men. 7. The Pennycook Indians, now quite extinct. 8. The Walnonoack Indians, about forty fighting men. 9. The Arouseguntecook Indians, not exceeding 160 men fit to march. 10. Masiassuck Indians, not exceeding sixty fighting men. Thus the Abnoquie extensive nation of Indians does not exceed 640 fighting men fit to march.

THE Iroquois Indians, we call them Mohawks. In all public accounts, they are lately called the six nations of New York, Friend Indians, the Tuscararoes, Emigrants, from the Old Tuscararoes of North Carolina, lately are reckoned as the sixth, we

shall reckon them as formerly. 1. The Mohawks, the number of their sensible men about 160. 2. Oneidaes, consisting of near 200 fighting men. 3. Onondagues, consist of about 250 men. 4. Cayugaes, about 130 men. 5. Senekeas, about 700 marching fighting men. The fighting men of the five or six nations of Mohawks, may be reckoned at 1500 men, and extend from Albany west, about 400 miles, lying in the New-York, Pennsylvania, Maryland, and Virginia governments, in about 30 tribes or villages. Besides these, there is settled a little above Monreal, a tribe of scoundrel runaways from the Mohawks, they are called Kahnuaes, of about 80 men.

THE Chowans, on the east side of the Apalatian mountains, or great blue hills, are reduced to a small number.

THE Tuscararoes lie between Roanoke and Pemlico rivers, in North Carolina, do not exceed 200 fighting men.

CATABAWS,

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CATABAWS, a small nation of about 300 men.

CHIRAKEES, a populous and extensive nation, of about 6000 men.

CREEK Indians of Florida, about 2000 men.

INDIAN families, or small tribes, upon reserved lands interspersed with the British settlements in North America. Upon the lower parts of the several rivers which run into the Atlantic ocean, in the British settlements, are several small distinct tribes, or related families, which are not reckoned as belonging to the further inland large nations; they extinguish apace from the infection of our European distempers and vices: it can be of no use to follow a detail of these perishing transitory small tribes or families; as a sample, I shall enumerate those in the province of Massachusetts bay.

By act of the Massachusetts-bay assembly, *anno* 1746, the Indian reserves being distinguished into eight parcels, guardians or managers for these silly Indians were appointed ; 1. Upon the eastern part of the promontory or peninsula of Cape Cod, in the township of Truro, Eastham, Chatham, Harwich, and Yarmouth : these Indians go by the several names of Pamet, Noffet, Pachee, Potowmaket, (here is an Indian congregation with a minister,) Sochtowwoket, and Nobscuffet. 2. The western part of said peninsula of Cape Cod, in the townships of Barnstable, Sandwich, and Falmouth, called the *Indians of Wayanaes* (the name of a formerly greatest Sachem in that country) or *Hayanaes*, Costoweet, Mashpe, Waquoit, (Oyster-harbour) Scootin, and Saconoffet or Woods-hole, the Ferry-place to Martha's Vineyard. 3. The Indians of the island of Nantucket, about 900 souls, being more than all the others together, are very useful in the whale and cod-fishing. 4. Indians of
Martha's

Martha's Vineyard island about 450; lately many of them have gone to settle in Nantucket, being a place of better employment. 5. The Indians of Plymouth, Pembroke, and Middleborough, called Nantasket. 6. The Nipmugs, formerly known by the names of Catamogs, or Nipnets, in the townships and districts of Dudley, Oxford, Woodstock, Killinsbay, and Douglas; the Hasanamissets in Grafton and Sutton; the Nashobees in Littleton, Stow, Acton, and Concord; Nashaways in Lancaster and Groton. 7. The Indian plantation of Natick, not exceeding twenty families of Indians. 8. Puncopay Indians, in the township of Stoughton, being three or four families. Besides these there is in the south-west corner of the province of Massachusetts-bay, about twenty-five miles east from Hudson's or York-river, a small tribe of Indians called *Housatonicks*, upon a river of that name, called *Westenhook* by the Dutch: they are lately intermixed with

with the English in the townships of Sheffield and Stockbridge.

EXCEPTING the Indians of Nantucket and Martha's Vineyard, (better employed,) all the others in a few years will be extinct. Most of all their men were persuaded to enlist as soldiers in the late expeditions to Cuba and Carthagená against the Spaniards, and to Cape Breton and Nova Scotia against the French; scarce any of them survived, and the names and memory of their tribes not worth preserving.

NUMBER XXVI.

Copied from Dr. Lind on the scurvy,
part 3. ch. 1. amongst the excerpts
from several authors. p. 350 *et seq.*

[*The second voyage of James Cartier to Newfoundland, by the Grand Bay, up the river of Canada, anno 1535.*]

IN the month of December we understood that the Pestilence was come upon the people of Stadacona, and in such sort, that before we knew of it above fifty of them died. Whereupon we charged them neither to come near our forts, nor about our ships. Notwithstanding which the said unknown sickness began to spread itself amongst us, after the strangest sort that ever was either heard of or seen, inso-much that some did lose all their strength, and could not stand upon their feet; then did their legs swell, their sinews shrunk, and became as black as a coal. Others
had

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had also their skin spotted with spots of blood, of a purple colour. It ascended up their ancles, knees, thighs, shoulders, arms, and neck. Their mouth became stinking, their gums so rotten that all the flesh came away, even to the roots of their teeth, which last did almost all fall out. This infection spread so about the middle of February, that of a hundred and ten people there were not ten whole; so that one could not help the other: a most horrible and pitiful case! Eight were already dead, and more than fifty sick, seemingly past all hopes of recovery. This malady being unknown to us, the body of one of our men was opened, to see, if by any means possible, the occasion of it might be discovered, and the rest of us preserved. But in such sort did the calamity increase, that there were not now above three sound men left. Twenty-five of our best men died, and all the rest were so ill, that we thought they would never recover again; when it pleased God
to

to cast his pitiful eye upon us, and send us the knowledge of a remedy for our health and recovery.

OUR captain, considering the deplorable condition of his people, one day went out of the fort, and, walking upon the ice, he saw a troop of people coming from Stadacona. Among those was Domogaia, who, not above ten or twelve days before, laboured under this disease, having his knees swelled as big as a child's head of two years old; his sinews shrunk, his teeth spoiled, and his gums rotten and stinking. The captain, upon seeing him now whole and sound, was thereat marvellously glad, hoping to know of him how he had cured himself. He acquainted him, that he had taken the juice of the leaves of a certain tree, a singular remedy in this disease. The tree, in their language, is called *Ameda*, or *Hanneda*; by a decoction of the bark and leaves of which they were all perfectly recovered in a short time.

N U M B E R X X V I I .

Of the colony sent over from France, under the Lord of Roberval, there died in the winter fifty of this disease. We have sometime afterwards the following farther account of it.

[*Nova Francia, or a description of that part of New France, which is one continent with Virginia, in three late voyages and plantations made by Messieurs de Monts, du Pontgrave, and de Poutrincourt, published by L'Escarbot, anno 1604.*]

“ **B**RIEFLY, the unknown sicknesses, like to those described by James Cartier, assailed us. As to remedies there were none to be found. In the mean while, the poor creatures did languish, pining away by little and little for want of means
to

to sustain their stomach, which could not receive hard food, by reason of a rotten flesh which grew and over-abounded within their mouths; and when one thought to root it out, it grew again in one night's space more abundantly than before. As to the tree called *Ameda*, mentioned by the said Cartier, the savages of these lands know it not. It was most pitiful to behold every one (very few excepted) in this great misery; wretches dying, as it were full of life, without any possibility of being succoured. Thirty-six died, and thirty-six or forty more stricken with it, recovered themselves by the help of the spring, so soon as that comfortable season appeared. The deadly season is the end of January, the months of February and March, wherein the sick die most commonly every one in his turn, according to the time they begin to be ill; in such sort, that he who is taken ill in February and March may escape, but those who betake themselves to bed in December and January, are in danger of dying in

February, March, or in the beginning of April; which time being past, there are hopes and assurance of safety. M. de Monts being returned into France, consulted the doctors of physick upon this sickness; which, in my opinion, they found very new, and altogether unknown to them; for I do not find that, when we went away, our apothecary was charged with any order or directions for the cure thereof."

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THE author afterwards observes it to be the Scurvy; a malady to which the Northern nations, the Dutch, &c. are very subject; and, upon this occasion, quoting a passage from Olaus Magnus, says, “ I have delighted myself to recite the words of this author, because he speaketh thereof as being skilled, and has well described the disease; only he maketh no mention of the stiffening of the hams, nor of the superfluous flesh which groweth in the mouth.” He further observes, that the savages use frequent sweatings for cure of this malady; and that a singular preservative against it is content, or mirth, and a chearful humour; as it commonly attacked the discontented, idle, and repining. But the last and most sovereign remedy was the *Ameda* mentioned by Cartier, which he calls the tree of life. This Monsieur Champlain, who was then up the country, had orders to search for among the Indians, and to make provision of it, for the preservation of their colony.

NUM-

NUMBER XXIX.

From Dr. Lind, page 218.

IT is indeed matter of surprise, and was taken notice of before, as the most convincing proof, that this calamity may be prevented any where, that the people who reside at our factories in Hudson's bay are so very healthy ; where, according to Ellis's account, they sometimes do not bury one man in seven years out of a hundred that are in their four factories : whereas the first adventurers to that part of the world, who wintered in the same places, were almost all destroyed by the Scurvy, *viz.* Capt. Monk's people in 1619, Captain Thomas James's at Charleton island in 1631, and most others who attempted it. A set of sailors, consisting of seven men, was left two winters successively, in the years 1633 and 1634, at Greenland and Spitzbergen, by way of experiment, but every man of them next spring was found to have died of the Scurvy.

NUM-

NUMBER XXX.

From Dr. Lind, pages 128, 129.

MOREOVER, the same causes, when subsisting at land, have been experienced at times, to give rise to as virulent and epidemic Scurvies as at sea. Thus, during the siege of Thorn, in the year 1703, several thousand Saxons, shut up in that city, were cut off by it. But at the latter end of the siege, they being blockaded for five months, the season appears to have been uncommonly tempestuous and rainy over most of Europe: so that in this situation, the inconveniencies and hardships they suffered, must have been equal to those of seamen. They were continually exposed to unwholesome damp weather; their diet was gross and viscid, viz. ammunition bread, salt and dried meats, and other solid and coarse food, which they were at that time obliged

obliged to live upon, being deprived of vegetables. We are told, that when some few of the most common and coarsest greens were permitted to be brought into the town, by agreement entered into with the enemy, they were voraciously devoured by the officers at the gates, as the greatest delicacies. The inhabitants, indeed, ascribed the calamity to the unwholesome beer in the city : but it was observable it attacked and cut off first the Saxon garrison, who were more exposed to the inclemency of such weather, by doing hard duty night and day upon the walls. The inhabitants, who remained in warmer lodgings, were much later infected with it, and probably only those who, upon the garrison's being almost destroyed, were obliged to do duty. This was a real Scurvy, as no sooner the gates were opened, and plenty of vegetables admitted, upon the surrender of the town, but the disease quickly disappeared, after having occasioned a very dreadful mortality.

NUM-

NUMBER XXXI.

From Moor's Travels, page 175.

[Taken from a Journal of a Voyage up the Gambia; being an Attempt for making Discoveries, and improving the Trade of that River, for the Use of the Royal African Company, by Messrs. Bartholomew Stibbs, Edward Drummond, and Richard Hull, in the Year 1723.]

ON the 7th of October 1723, I arrived at the mouth of the river Gambia, with the African company of England's ship Dispatch, having proper instructions for proceeding up the said river with canoas as far as possible, in quest of the gold mines, and making other discoveries in this country. Page 184. Sickness and mortality obliged us to make some alterations, as to our white men. Page 187. At Tanerowall

it was agreed between us, that (the better to observe the company's orders and instructions,) Captain Stibbs keep the journal, and take the bearings and distances of the points and reaches of this river, &c. that Mr. Drummond keep the accounts, &c. and that Mr. Hull take every opportunity of going ashore, in order to make discoveries of ores, minerals, and vegetables, &c. and to collect and keep the same. Page 208. I being out of order, and feverish, Mr. Drummond and Mr. Hull set out in the canoa. Page 223. It is to be observed, that we neither buried one man, nor was there one hardly sick; on the contrary, those that were in a weak condition on our setting out, grew afterwards very healthy, fat, and strong; but my ship, which lay at Cuttejar, proved very sickly and unhealthful. We have been upon our voyage from James's Fort, to our return, two months twenty-three days.

F I N I S.

